



# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178  
(909) 396-2000 • [www.aqmd.gov](http://www.aqmd.gov)

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## A G E N D A

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### MEETING, JUNE 2, 2017

A meeting of the South Coast Air Quality Management District Board will be held at 9:00 a.m., in the Auditorium at SCAQMD Headquarters, 21865 Copley Drive, Diamond Bar, California.

#### Questions About an Agenda Item

- The name and telephone number of the appropriate staff person to call for additional information or to resolve concerns is listed for each agenda item.
- In preparation for the meeting, you are encouraged to obtain whatever clarifying information may be needed to allow the Board to move expeditiously in its deliberations.

#### Meeting Procedures

- The public meeting of the SCAQMD Governing Board begins at 9:00 a.m. The Governing Board generally will consider items in the order listed on the agenda. However, any item may be considered in any order.
- After taking action on any agenda item not requiring a public hearing, the Board may reconsider or amend the item at any time during the meeting.

#### Questions About Progress of the Meeting

- During the meeting, the public may call the Clerk of the Board's Office at (909) 396-2500 for the number of the agenda item the Board is currently discussing.

The agenda and documents in the agenda packet will be made available upon request in appropriate alternative formats to assist persons with a disability. Disability-related accommodations will also be made available to allow participation in the Board meeting. Any accommodations must be requested as soon as practicable. Requests will be accommodated to the extent feasible. Please telephone the Clerk of the Boards Office at (909) 396-2500 from 7:00 a.m. to 5:30 p.m. Tuesday through Friday.

All documents (i) constituting non-exempt public records, (ii) relating to an item on the agenda, and (iii) having been distributed to at least a majority of the Governing Board after the agenda is posted, are available prior to the meeting for public review at the South Coast Air Quality Management District Clerk of the Board's Office, 21865 Copley Drive, Diamond Bar, CA 91765.

The Agenda is subject to revisions. For the latest version of agenda items herein or missing agenda items, check the District's web page ([www.aqmd.gov](http://www.aqmd.gov)) or contact the Clerk of the Board, (909) 396-2500. Copies of revised agendas will also be available at the Board meeting.

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## **CALL TO ORDER**

- Pledge of Allegiance
- Opening Comments: William A. Burke, Ed.D., Chair  
Other Board Members  
Wayne Nastri, Executive Officer

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Staff/Phone (909) 396-

## **CONSENT CALENDAR (Items 1 through 18)**

Note: Consent Calendar items held for discussion will be moved to Item No. 19

1. Approve Minutes of May 5, 2017 Board Meeting **Garzaro/2500**
2. Set Public Hearings July 7, 2017 to Consider Adoption of and/or Amendments to SCAQMD Rules and Regulations **Nastri/3131**
  - A. Amend Rule 1118 - Control of Emissions from Refinery Flares and Determine that Proposed Amendments are Exempt from CEQA **Fine/2239**

Refineries are required to minimize their flaring under Rule 1118. Recent significant flaring events at some local refineries have shown that additional actions are needed to further reduce flaring emissions. PAR 1118 will incorporate parts of U.S. EPA's recently updated Refinery Sector Rule that prohibits the frequency of certain flaring events. PAR 1118 will also require facilities to prepare a Scoping Document to evaluate the feasibility of reducing or avoiding flaring events, update emission factors based on recent U.S. EPA guidance, remove the annual cap on mitigation fees paid for flaring, enhance current reporting requirements, and other administrative updates. (Reviewed: Stationary Source Committee, May 19, 2017)



**B. Certify the Final Environmental Assessment and Adopt Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants** **Nakamura/3105**

Proposed Rule 1466 establishes requirements to minimize fugitive particulate matter emissions from earth-moving activities at sites that the U.S. EPA, California Department of Toxics Substances Control, State Water Resources Control Board, or Regional Water Quality Control Board have determined that the soil contains arsenic, asbestos, cadmium, hexavalent chromium, lead, mercury, nickel, or polychlorinated biphenyl(s) that exceed levels of concern. Proposed Rule 1466 also includes criteria that allows the Executive Officer to identify sites that would be applicable to Proposed Rule 1466. The proposal will require monitoring of PM10 levels, dust control measures, notification to the SCAQMD when these activities are occurring and exceedance of the PM10 levels, and recordkeeping and signage requirements for the sites. This action is to adopt the resolution: 1) Certifying the Final Environmental Assessment for Proposed Rule 1466 - Control of Particulate Emissions from Soils with Toxic Air Contaminants; and 2) Adopting Rule 1466 - Control of Particulate Emissions from Soils with Toxic Air Contaminants. (Reviewed: Stationary Source Committee, May 19, 2017)

**Budget/Fiscal Impact**

**3. Execute Contract for Secondary Organic Aerosol Formation Study and Amend Technical Assistance Contracts for In-Use Emissions Testing for Heavy-Duty Vehicles** **Miyasato/3249**

Secondary organic aerosol (SOA) is an important component of suspended fine atmospheric particulate matter with significant environmental risks. Design of an effective emission control strategy to reduce the risks requires further understanding of the formation of SOA. As part of an in-use emissions test previously approved by the Board, staff is proposing to assess SOA concentrations from heavy-duty diesel and natural gas vehicles. These actions are to execute a contract with University of California Riverside CE-CERT to evaluate the SOA formation from heavy-duty diesel and natural gas vehicles and amend contracts with Gladstein, Neandross & Associates, LLC, and AEE Solutions, LLC, to provide technical assistance for in-use emissions testing for heavy-duty vehicles at a total cost not to exceed \$85,000, \$50,000 and \$50,000, respectively, from the Clean Fuels Fund (31). (Reviewed: Technology Committee, May 19, 2017; Recommended for Approval)

4. **Transfer and Appropriate Funding, Execute Contract, Authorize Release of RFQ and Issue Purchase Orders** **Miyasato/3249**

Field monitoring of PM and gravimetric analysis of PM samples continues to be an important part of ongoing efforts to better characterize air quality in the South Coast Basin. The effectiveness and efficiency of such monitoring and analysis efforts can be enhanced by upgrading existing laboratory facilities and investing in new and updated field platforms and equipment that would allow for more reliable instrument performance, rapid response and reporting. Consequently, this action is to upgrade the laboratory PM weighing room and purchase two state-of-the-art continuous Federal Equivalent Method monitors and two mobile air monitoring platforms. This action is to also transfer and appropriate up to \$323,500 into Science & Technology Advancement's FY 2016-17 and/or 2017-18 Budgets for the weighing room upgrade and equipment purchases and to transfer up to \$230,000 between Major Objects within Science & Technology Advancement's FY 2016-17 Budget to realign expenditures for the FY 2016-17 Enhanced Particulate Monitoring Program. (Reviewed: Administrative Committee, May 12, 2017; Recommended for Approval)
5. **Approve Awards for Electric School Buses** **Minassian/2641**

At its December 2, 2016 meeting, the Board issued a Program Announcement to solicit applications for electric school buses. This action is to approve awards for electric school buses and associated charging infrastructure in an amount not to exceed \$8,844,000 from the Carl Moyer Program AB 923 Fund (80). (Reviewed: Technology Committee, April 21, 2017; Recommended for Approval)
6. **Reallocate Funding Sources for Projects Under Carl Moyer Program** **Minassian/2641**

On October 7, 2016, the Board awarded contracts under the FY 2015-16 "Year 18" Carl Moyer Program, including two contracts executed for \$249,050 to repower a marine vessel and \$627,873 to replace one off-road agricultural equipment from the Carl Moyer Program Fund (32). Subsequently, staff identified \$225,136 in turn-back funds from withdrawn projects from a 2012 Diesel Emissions Reduction Act (DERA) grant. This action is to amend both contracts, substituting \$225,136 in Carl Moyer funds with the unencumbered portion of the 2012 DERA grant in the Advanced Technology, Outreach and Education Fund (17). (Reviewed: Technology Committee, May 19, 2017; Recommended for Approval)
7. **Extend Contract for Targeted YouTube Videos and Banner Ads for the 2017-18 Check Before You Burn Program** **Atwood/3687**

The contract with Google to help promote the Check Before You Burn (CBYB) program is currently set to expire on June 30, 2017. This action is to authorize the Executive Officer to extend the current contract with Google, Inc. for \$250,000, for the 2017-18 CBYB program. This contract will be executed from the Rule 1309.1 Priority Reserve Fund (36). (Reviewed: Administrative Committee, May 12, 2017; Recommended for Approval)

8. **Transfer Funds and Issue Purchase Orders for Necessary Software and Hardware to Develop Enterprise Geographical Information System** **O'Kelly/2828**

A recent strategic planning effort for an Enterprise Geographical Information System (EGIS) identified a need to use GIS more broadly across the diverse business processes at SCAQMD. In order to implement the recommended EGIS, SCAQMD needs to update the current spatial IT infrastructure, storage environment and delivery of geospatial services to serve a growing need for geospatial data and to enable integration with other supported business systems and databases. This action is to transfer funds within the Information Management (IM) FY 2016-17 Budget, and to issue purchase orders for the acquisition of computer hardware and software necessary for the development of an EGIS at a total cost not to exceed \$80,000. Funds are available in IM's FY 2016-17 Budget. (Reviewed: Administrative Committee, May 12, 2017; Recommended for Approval)

9. **Appropriate Funds and Authorize Amending Contracts with Outside Counsel and Specialized Legal Counsel and Services** **Wiese/3460**

Legal is currently being assisted in environmental lawsuits by outside law firms and in other matters requiring specialized legal counsel and services, including ongoing litigation. This action is to appropriate \$250,000 from Undesignated Fund Balance to Legal's FY 2016-17 Budget and amend contracts to expend these funds with prequalified counsel approved by the Board as well as specialized legal counsel and services. (Reviewed: Administrative Committee, May 12, 2017; Recommended for Approval)

10. **Approve Contract Award and Modification and Issue Solicitations Approved by MSRC** **Pettis**

As part of their FYs 2016-18 AB 2766 Discretionary Fund Work Program, the MSRC approved a new contract under the Major Event Center Transportation Program. The MSRC also approved a modification to a contract under the Signal Synchronization Partnership Program as part of their FYs 2012-14 Work Program, and the release of a Program Announcement for Natural Gas Infrastructure as part of their FYs 2016-18 Work Program. In addition, the contract for the MSRC's Technical Advisor expires September 30, 2017. To ensure continuation of these services, as part of the FYs 2016-18 Work Program, the MSRC approved the release of an RFP to solicit Technical Advisor services. At this time the MSRC seeks Board approval of the contract award and modification and to release the solicitations. (Reviewed: Mobile Source Air Pollution Reduction Review, May 18, 2017; Recommended for Approval)

**Action Item/No Fiscal Impact**

11. Authorize Staff to Submit Letter of Support for CARB Locomotive Petition to U.S. EPA **Baird/2302**

On April 13, 2017, CARB petitioned the U.S. EPA to adopt more stringent emission standards for locomotives. CARB seeks updated emission standards for new and remanufactured locomotives. New "Tier 5" standards for new locomotives, beginning in year 2025, would obtain up to 99% NOx and PM controls relative to uncontrolled locomotives. Such locomotives would also have the capability for zero-emission operations in designated areas. Standards for remanufactured locomotives would begin in year 2023 and would differ according to date of manufacture. CARB states that its 2016 Technology Assessment for Freight Locomotives demonstrates that these standards are feasible. CARB's Petition is consistent with the need demonstrated in the 2016 AQMP for U.S. EPA to implement greater controls for sources that are under federal authority. Staff requests authorization to send a letter of support to U.S. EPA to support CARB's petition, and to urge U.S. EPA to adopt stringent new standards as soon as feasible. (Reviewed: Mobile Source Committee, May 19, 2017; Recommended for Approval)

**Items 12 through 18 - Information Only/Receive and File**

12. Legislative, Public Affairs and Media Report **Alatorre/3122**

This report highlights the April 2017 outreach activities of the Legislative, Public Affairs and Media Office, which include: Environmental Justice Update, Community Events/Public Meetings, Business Assistance, Media Relations, and Outreach to Business, Federal, State, and Local Government. (No Committee Review)

13. Hearing Board Report **Camarena/2500**

This reports the actions taken by the Hearing Board during the period of April 1 through April 30, 2017. (No Committee Review)

14. Civil Filings and Civil Penalties Report **Wiese/3460**

This reports the monthly penalties from April 1 through April 30, 2017, and legal actions filed in the General Counsel's Office from April 1 through April 30, 2017. An Index of District Rules is attached with the penalty report. (Reviewed: Stationary Source Committee, May 19, 2017)

15. Lead Agency Projects and Environmental Documents Received by SCAQMD **Nakamura/3105**

This report provides, for the Board's consideration, a listing of CEQA documents received by the SCAQMD between April 1, 2017 and April 30, 2017, and those projects for which the SCAQMD is acting as lead agency pursuant to CEQA. (Reviewed: Mobile Source Committee, May 19, 2017)

16. Report of RFQs Scheduled for Release in June **O'Kelly/2828**

This report summarizes the RFQs for budgeted services over \$75,000 scheduled to be released for advertisement for the month of June. (Reviewed: Administrative Committee, May 12, 2017; Recommended for Approval)

17. Rule and Control Measure Forecast **Fine/2239**

This report highlights SCAQMD rulemaking activities and public workshops potentially scheduled for the year 2017. (No Committee Review)

18. Status Report on Major Ongoing and Upcoming Projects for Information Management **O'Kelly/2828**

Information Management is responsible for data systems management services in support of all SCAQMD operations. This action is to provide the monthly status report on major automation contracts and planned projects. (Reviewed: Administrative Committee, May 12, 2017; Recommended for Approval)

19. Items Deferred from Consent Calendar

**BOARD CALENDAR**

20. Administrative Committee (Receive & File) **Chair: Burke Nastri/3131**

21. Investment Oversight Committee (Receive & File) **Chair: Cacciotti O'Kelly 2828**

22. Legislative Committee **Chair: Mitchell Alatorre/3122**

Receive and file; and take the following actions as recommended:

<b>Agenda Item</b>	<b>Recommendation</b>
AB 378 (C.Garcia) Greenhouse Gases, Criteria Air Pollutants, and Toxic Air Contaminants	Work with Author
AB 890 (Medina) Local Land Use Initiatives: Environmental Review	Watch
AB 1073 (E. Garcia) California Clean Truck, Bus, and Off-Road Vehicle and Equipment Technology Program	Support
AB 1647 (Muratsuchi) Petroleum Refineries: Air Monitoring Systems	Work with Author

- |     |   |                       |                |
|-----|---|-----------------------|----------------|
| 23. | Mobile Source Committee (Receive & File)                                | Chair: Parker         | Fine/2239      |
| 24. | Stationary Source Committee (Receive & File)                            | Chair: Benoit         | Tisopulos/3123 |
| 25. | Technology Committee (Receive & File)                                   | Chair: Buscaino       | Miyasato/3249  |
| 26. | Mobile Source Air Pollution Reduction Review Committee (Receive & File) | Board Liaison: Benoit | Minassian/2641 |
| 27. | California Air Resources Board Monthly Report (Receive & File)          | Board Rep: Mitchell   | Garzaro/2500   |

### **PUBLIC HEARINGS**

- |     |  |              |
|-----|--|--------------|
| 28. | Adopt Executive Officer's FY 2017-18 Proposed Goals and Priority Objectives, Draft Budget and Proposed Amended Regulation III – Fees and Determine that Proposed Amendments Are Exempt from CEQA | O'Kelly/2828 |
|-----|--|--------------|

The Executive Officer's Budget, Goals and Priority Objectives for FY 2017-18 have been developed and are recommended for adoption. In addition, staff is proposing amendments to Regulation III – Fees. The Governing Board will first determine that the proposed amendments are exempt from CEQA. These amendments include the following fee increases: 1) Pursuant to Rule 320, an increase of most fees by 2.5% consistent with the Consumer Price Index; 2) A fee increase of 16% in specified fees for Title V sources in FY 2017-18 and an additional 16% increase in FY 2018-19; and 3) A 4% increase in specified fees for non-Title V sources for FY 2017-18 and an additional 4% increase in FY 2018-19. The fee increases have been presented at a Budget Study Session, Budget Advisory Committee meeting and at two public consultation meetings in April with recommendations and comments provided to the Board. Finally, staff recommends other proposed changes to Regulation III which have no fee impact, but do include clarifications, deletions or corrections to existing rule language. (Reviewed: Special Governing Board Meeting/Budget Study Session, April 21, 2017)

29. Certify the Final Subsequent Environmental Assessment and Amend Rule 1147 - NOx Reductions from Miscellaneous Sources

Nakamura/3105

SCAQMD staff is proposing to amend Rule 1147 to reflect the recommendations made in the Final Rule 1147 Technology Assessment. PAR 1147 would allow in-use equipment with NOx emissions less than one pound per day to defer compliance with applicable emission limits until the unit is replaced or the burner is replaced. The proposed amended rule would also increase the NOx emission limit for certain equipment categories that were identified in the Final Rule 1147 Technology Assessment and exempt new and existing equipment rated at less than 325,000 btu per hour from the emissions limits of the rule. The proposed amended rule also provides options to demonstrate compliance and other minor changes to improve clarity. PAR 1147 is expected to result in NOx emission reductions delay of up to 0.9 tons per day. However, the emission reductions will begin to be recaptured starting in 2017 because the existing units will be regularly replaced and upgraded over time, leaving less than 0.03 tons per day NOx emissions reductions foregone associated with the less than 325,000 btu per hour exemption. This action is to adopt the resolution: 1) Certifying the Final Subsequent Environmental Assessment for Proposed Amended Rule 1147 - NOx Reductions from Miscellaneous Sources; and 2) Amending Rule 1147 - NOx Reductions from Miscellaneous Sources. (Reviewed: Stationary Source Committee, April 21, 2017)

30. Certify Nonattainment New Source Review Compliance Demonstration for 2008 Ozone Standard

Fine/2239

The District has an existing federally-approved nonattainment New Source Review (NSR) program that covers the South Coast Air Basin and Coachella Valley, which are designated extreme and severe-15 nonattainment, respectively. The District program, which applies to new major stationary sources and major modifications to existing major sources, is at least as stringent as the requirements set forth by the U.S. EPA. States must submit a nonattainment NSR plan or plan revision for the 2008 ozone standard certifying that the current SIP-approved nonattainment NSR program meets the requirements for the implementation of the 2008 ozone NAAQS. This action is to seek Board certification of the nonattainment NSR compliance demonstration for submittal to CARB for its approval and to submit to U.S. EPA for inclusion in the SIP. (Reviewed: Stationary Source Committee, May 19, 2017)

**PUBLIC COMMENT PERIOD** – (Public Comment on Non-Agenda Items, Pursuant to Government Code Section 54954.3)

**BOARD MEMBER TRAVEL** – (*No Written Material*)

Board member travel reports have been filed with the Clerk of the Boards, and copies are available upon request.

### **CONFLICT OF INTEREST DISCLOSURES – (No Written Material)**

Under the approval authority of the Executive Officer, the District will enter into contracts with Gladstein, Neandross & Associates (Contract Nos. C17346 & C17351) and contract modifications with University of California, Riverside CE-CERT (Contract Nos. C156072 & C156251). The contractors are potential sources of income for Governing Board Member Joseph Lyo, which qualify for the remote interest exception of Section 1090 of the California Government Code. Dr. Lyo abstained from any participation in the making of the contracts and contract modifications.

### **CLOSED SESSION - (No Written Material)**

Wiese/3460

#### CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION

It is necessary for the Board to recess to closed session pursuant to Government Code sections 54956.9(a) and 54956.9(d)(1) to confer with its counsel regarding pending litigation which has been initiated formally and to which the SCAQMD is a party. The actions are:

- Aerocraft Heat Treating Co., Inc. v. SCAQMD, Los Angeles Superior Court Case No. TC028725;
- SCAQMD v. Anaplex, Los Angeles Superior Court Case No. BC608322 (Paramount Hexavalent Chromium);
- In the Matter of SCAQMD v. Aerocraft Heat Treating Co., Inc. and Anaplex Corp., SCAQMD Hearing Board Case No. 6066-1 (Order for Abatement);
- Bahr v. U.S. EPA, United States Court of Appeals, Ninth Circuit, Case No. 14-72327;
- In the Matter of SCAQMD v. Browning-Ferris Industries of California, Inc. dba Sunshine Canyon Landfill, Hearing Board Case No. 3448-14;
- Communities for a Better Environment v. SCAQMD, Los Angeles Superior Court Case No. BS161399 (RECLAIM);
- People of the State of California, ex rel SCAQMD v. Exide Technologies, Inc., Los Angeles Superior Court Case No. BC533528;
- In the Matter of SCAQMD v. Exide Technologies, Inc., SCAQMD Hearing Board Case No. 3151-29 (Order for Abatement);
- In re: Exide Technologies, Inc., U.S. Bankruptcy Court, District of Delaware, Case No. 13-11482 (KJC) (Bankruptcy case);
- In the Matter of SCAQMD v. Torrance Refining Company, LLC, SCAQMD Hearing Board Case No. 6060-5 (Order for Abatement);
- Fast Lane Transportation, Inc. et al. v. City of Los Angeles, et al., Contra Costa County Superior Court Case No. MSN14-0300 (formerly South Coast Air Quality Management District v. City of Los Angeles, et al., Los Angeles Superior Court Case No. BS 143381) (SCIG); and
- Szymanski v. SCAQMD, Workers' Compensation Appeals Board Case No. ADJ9752399.

### **ADJOURNMENT**



**\*\*PUBLIC COMMENTS\*\***

Members of the public are afforded an opportunity to speak on any listed item before or during consideration of that item. Please notify the Clerk of the Board, (909) 396-2500, if you wish to do so. All agendas are posted at SCAQMD Headquarters, 21865 Copley Drive, Diamond Bar, California, at least 72 hours in advance of the meeting. At the end of the agenda, an opportunity is also provided for the public to speak on any subject within the SCAQMD's authority. Speakers may be limited to three (3) minutes each.

Note that on items listed on the Consent Calendar and the balance of the agenda any motion, including action, can be taken (consideration is not limited to listed recommended actions). Additional matters can be added and action taken by two-thirds vote, or in the case of an emergency, by a majority vote. Matters raised under Public Comments may not be acted upon at that meeting other than as provided above.

Written comments will be accepted by the Board and made part of the record, provided 25 copies are presented to the Clerk of the Board. Electronic submittals to [cob@aqmd.gov](mailto:cob@aqmd.gov) of 10 pages or less including attachment, in MS WORD, plain or HTML format will also be accepted by the Board and made part of the record if received no later than 5:00 p.m., on the Tuesday prior to the Board meeting.

**ACRONYMS**

AQ-SPEC = Air Quality Sensor Performance  
Evaluation Center

AQIP = Air Quality Investment Program

AQMP = Air Quality Management Plan

AVR = Average Vehicle Ridership

BACT = Best Available Control Technology

Cal/EPA = California Environmental Protection Agency

CARB = California Air Resources Board

CEMS = Continuous Emissions Monitoring Systems

CEC = California Energy Commission

CEQA = California Environmental Quality Act

CE-CERT = College of Engineering-Center for Environmental  
Research and Technology

CNG = Compressed Natural Gas

CO = Carbon Monoxide

CTG = Control Techniques Guideline

DOE = Department of Energy

EV = Electric Vehicle

FY = Fiscal Year

GHG = Greenhouse Gas

HRA = Health Risk Assessment

LEV = Low Emission Vehicle

LNG = Liquefied Natural Gas

MATES = Multiple Air Toxics Exposure Study

MOU = Memorandum of Understanding

MSERCs = Mobile Source Emission Reduction Credits

MSRC = Mobile Source (Air Pollution Reduction) Review  
Committee

NATTS = National Air Toxics Trends Station

NESHAPS = National Emission Standards for  
Hazardous Air Pollutants

NGV = Natural Gas Vehicle

NOx = Oxides of Nitrogen

NSPS = New Source Performance Standards

NSR = New Source Review

OEHA = Office of Environmental Health Hazard  
Assessment

PAMS = Photochemical Assessment Monitoring  
Stations

PAR = Proposed Amended Rule

PEV = Plug-In Electric Vehicle

PHEV = Plug-In Hybrid Electric Vehicle

PM10 = Particulate Matter  $\leq$  10 microns

PM2.5 = Particulate Matter  $\leq$  2.5 microns

PR = Proposed Rule

RECLAIM = Regional Clean Air Incentives Market

RFP = Request for Proposals

RFQ = Request for Quotations

SCAG = Southern California Association of Governments

SIP = State Implementation Plan

SOx = Oxides of Sulfur

SOON = Surplus Off-Road Opt-In for NOx

SULEV = Super Ultra Low Emission Vehicle

TCM = Transportation Control Measure

ULEV = Ultra Low Emission Vehicle

U.S. EPA = United States Environmental Protection  
Agency

VOC = Volatile Organic Compound

ZEV = Zero Emission Vehicle

 [Back to Agenda](#)

BOARD MEETING DATE: June 2, 2017

AGENDA NO. 1

MINUTES: Governing Board Monthly Meeting

SYNOPSIS: Attached are the Minutes of the May 5, 2017 meeting.

RECOMMENDED ACTION:

Approve Minutes of the May 5, 2017 Board Meeting.

Denise Garzaro,  
Clerk of the Boards

DG

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**FRIDAY, MAY 5, 2017**

Notice having been duly given, the regular meeting of the South Coast Air Quality Management District Board was held at District Headquarters, 21865 Copley Drive, Diamond Bar, California. Members present:

Mayor Pro Tem Ben Benoit, Vice Chairman  
Cities of Riverside County

Supervisor Marion Ashley  
County of Riverside

Mayor Michael A. Cacciotti  
Cities of Los Angeles County – Eastern Region

Supervisor Sheila Kuehl  
County of Los Angeles

Dr. Joseph K. Lyou  
Governor's Appointee

Mayor Pro Tem Larry McCallon  
Cities of San Bernardino County

Council Member Judith Mitchell  
Cities of Los Angeles County – Western Region

Supervisor Shawn Nelson  
County of Orange

Dr. Clark E. Parker, Sr.  
Senate Rules Committee Appointee

Council Member Dwight Robinson  
Cities of Orange County

Supervisor Janice Rutherford  
County of San Bernardino

Members absent:

William A. Burke, Ed.D., Chairman  
Speaker of the Assembly Appointee

Council Member Joe Buscaino  
City of Los Angeles

**CALL TO ORDER:** Vice Chairman Benoit called the meeting to order at 9:00 a.m.

- Pledge of Allegiance: Led by Dr. Lyou.
- Opening Comments

Dr. Parker announced that he began his term as Chairman of the California Fuel Cell Partnership at their April 2017 meeting. He noted that demand for hydrogen fuel cell cars in California is expected to greatly increase in the next five years and explained that the cost to build hydrogen fueling stations has decreased significantly and private contractors are building fueling station infrastructure to provide better accessibility for these vehicles.

Mayor Pro Tem Benoit noted that Sunland Transit Agency in the Coachella Valley has decided to convert their natural gas bus fleet to hydrogen. He also noted that he attended an Edison Gap Meeting in Pomona where they debuted hybrid Edison boom trucks funded through MSRC. He added that the battery operation of the vehicle's equipment allows for increased safety, as well as emission reductions.

Mayor Cacciotti announced that the first hydrogen fueling station in South Pasadena opened a few weeks ago. He reported that he attended the ACT Expo in Long Beach on May 1, 2017, where he saw a police pursuit concept car and Ford F-150 hybrid vehicle. He noted the potential for the replacement of gasoline-powered public works and emergency vehicles to cleaner hybrid models.

Dr. Lyou reported that he also attended the ACT Expo and explained that one of the advantages of the hybrid police vehicle is that the engine will turn off rather than idle which will result in less wear and tear on the vehicle. He added that he participated in the unveiling of alternative fuel heavy-duty vehicles at the ACT Expo and a demonstration project by Toyota at the Port of Los Angeles held on April 21, 2017 which highlighted the developments being made in the heavy duty fuel cell industry. He noted that he also attended an Earth Day event in Lynwood where Southern California Edison launched their Charge Ready Program; a program aimed at deploying charging infrastructure in disadvantaged communities along the 710 Freeway corridor.

Councilman Robinson reported that he also attended, along with Dr. Lyou, the Toyota Hydrogen Fuel Cell unveiling at the Port of Los Angeles. He also noted that he had the opportunity to speak, as did Dr. Lyou and Councilwoman Mitchell, at the Natural Gas Port Trucks Workshop at Banning's Landing in the Port of Los Angeles about the developments in ultra-low NOx natural gas trucks. He noted that he also attended the ACT Expo and spoke on behalf of the Board on the progress in reducing emissions from mobile sources.

(Supervisor Rutherford arrived at 9:15 a.m.)

Mr. Nastri reported that he attended the National Association of Clean Air Agencies meeting May 1-3, 2017 in Washington D.C. and met with members of the U.S. EPA regarding the ultra-low NOx Heavy-Duty Truck Rule and the Clean Air Investment Program, and he found there was interest and support for the Clean Air Investment Program and making it part of the National Infrastructure Bill.

- Presentation by Dr. Anna Wu on Research Funded by Health Effects of Air Pollution Foundation

Dr. Anna Wu, Professor of Preventative Medicine at USC, presented information regarding a health study focusing on air pollution and brain tumors in adults which was funded by the Health Effects of Air Pollution Foundation.

Councilwoman Mitchell inquired about the expected outcomes of the study and when results from the data that has already been collected are expected.

Dr. Wu explained that this particular study is observational in nature so it will not establish cause and effect for certain, but it is an important first step in establishing exposure patterns that can be used in conjunction with other studies. With regard to results, she noted that it will likely be a full two years before results are collected due to the complexity of the study population.

Dr. Parker asked how researchers knew one type of brain tumor was more present in African Americans. Dr. Wu responded that the information was based on cancer statistics of other agencies.

Dr. Lyou noted that the research Dr. Wu is performing is very important to provide the Board with the type of scientific information needed to make sound policy decisions. He stressed the importance of continued collection of data surrounding ultrafine particulates and polycyclic aromatic hydrocarbons to isolate the associated adverse health impacts of particulates.

(Supervisor Nelson arrived at 9:40 a.m.)

### **CONSENT CALENDAR**

1. Approve Minutes of April 7, 2017 Board Meeting
2. Set Public Hearing June 2, 2017 to Consider Adoption of and/or Amendments to SCAQMD Rules and Regulations
  - A. Adopt Executive Officer's FY 2017-18 Proposed Goals and Priority Objectives, Draft Budget and Proposed Amended Regulation III – Fees

B. Amend Rule 1147 - NOx Reductions from Miscellaneous Sources

**Budget/Fiscal Impact**

3. Execute Contract to Provide for Real-time Public Alerts of Hydrogen Sulfide Events
4. Execute Contract to Educate Communities in Use and Operation of Air Quality Sensors
5. Execute Contract to Develop High Efficiency Near-Zero Emission Natural Gas Engines for Heavy-Duty Vehicles
6. Approve Awards for Electric School Buses
7. Extend Contract for Media, Advertising and Public Outreach for 2017-18 Check Before You Burn Program
8. Amend Contracts to Provide Short- and Long-Term Systems Development, Maintenance and Support Services
9. Approve Maximum Support Level Expenditures for Board Member Assistants and Board Member Consultants for FY 2017-18
10. Appropriate Funds from Undesignated Fund Balance and Authorize Amending Contract with Consulting Expert

**Items 11 through 17 - Information Only/Receive and File**

11. Legislative, Public Affairs and Media Report
12. Hearing Board Report
13. Civil Filings and Civil Penalties Report
14. Lead Agency Projects and Environmental Documents Received by SCAQMD

15. Rule and Control Measure Forecast
16. Report of RFPs Scheduled for Release in May
17. Status Report on Major Ongoing and Upcoming Projects for Information Management

Dr. Lyou announced his abstention on Item Nos. 3, 4 and 5 because Sonoma Technology, Comite Civico del Valle, Inc. and Southern California Gas Company are potential sources of income to him.

Agenda Item 2B was withheld for comment. Agenda Item 6 was withdrawn from consideration at staff's request.

MOVED BY CACCIOTTI, SECONDED BY KUEHL,  
AGENDA ITEMS 1, 2A, 3 THROUGH 5, AND 7  
THROUGH 17 APPROVED AS RECOMMENDED, BY  
THE FOLLOWING VOTE:

AYES: Ashley, Benoit, Cacciotti, Kuehl, Lyou  
(*except Item # 3, #4 and #5*), McCallon,  
Mitchell, Nelson, Parker, Robinson and  
Rutherford

NOES: None

ABSTAIN: Lyou (*Item #3, #4 and #5*)

ABSENT: Burke and Buscaino

18. Items Deferred from Consent Calendar

- 2B. Set Public Hearing June 2, 2017 to Amend Rule 1147 - NOx Reductions from Miscellaneous Sources

Tracy Goss, Planning and Rules Manager, explained that at the direction of the Stationary Source Committee, staff has further investigated a concern raised by the operator of a paint spray booth regarding temperature control during spraying operations. He reported that staff contacted a number of permitted facilities with similar burner configurations and found there was, in general, satisfaction with those systems. He added that both the burner and spray booth manufacturers are working with the individual who raised the concern and staff understands that they have developed a solution to resolve the issue going forward.

Bill LaMarr, California Small Business Alliance, expressed concern that staff had not addressed the performance and cost complaints that have been raised by small business owners regarding low-NOx burners. Mr. LaMarr would like additional changes to the rule. He expressed concerns with the lack of available certified burner technologies, but also stated that while MidCo has sent technicians to address complaints from customers, other small businesses are still encountering problems with the technology.

MOVED BY LYOU, SECONDED BY MITCHELL,  
AGENDA ITEM 2B APPROVED AS  
RECOMMENDED, BY THE FOLLOWING VOTE:

AYES: Ashley, Benoit, Cacciotti, Kuehl, Lyou  
McCallon, Mitchell, Nelson, Parker,  
Robinson and Rutherford

NOES: None

ABSENT: Burke and Buscaino

#### **BOARD CALENDAR**

19. Administrative Committee
20. Legislative Committee
21. Refinery Committee
22. Stationary Source Committee
23. Technology Committee
24. California Air Resources Board Monthly Report

Agenda Item No. 20 was withheld for discussion.



MOVED BY LYOU, SECONDED BY CACCIOTTI, AGENDA ITEMS 19 AND 21 THROUGH 24, APPROVED AS RECOMMENDED, RECEIVING AND FILING THE COMMITTEE AND CARB REPORTS, BY THE FOLLOWING VOTE:

AYES: Ashley, Benoit, Cacciotti, Kuehl, Lyou, McCallon, Mitchell Nelson, Parker, Robinson and Rutherford

NOES: None

ABSENT: Burke and Buscaino

20. Legislative Committee

Supervisor Kuehl suggested that the Board adopt the position of "Support" regarding the Fleet Rules Legislation as the language has been amended to address concerns that were raised that led the Legislative Committee to recommend continuing the matter to their next meeting for consideration.

Supervisor Rutherford asked for clarification on the definition of a fleet that is being utilized in the language and expressed concern with not having the actual amended language to review.

Supervisor Kuehl noted that she understands that a fleet is being defined as 15 vehicles.

Dr. Lyou noted the importance of having staff involved in this legislative process to ensure the District is adequately represented.

Councilwoman Mitchell suggested that the recommendation on AB 302 be to "Support if Amended to define a fleet as 15 vehicles".

Councilman Robinson suggested that, in the future, the consideration of legislative items by the Legislative Committee and Board be done in a manner as that avoids rushed decisions.

Supervisor Nelson discussed how the Orange County Transportation Authority had been innovators in changing their fleet and asked if the legislation could lead to stranded assets.

Mr. Nastri explained that the fleet regulations would only apply upon replacement. This bill provides authority for rulemaking and staff would work through that process to address any issues.

Todd Campbell, Clean Energy and California Natural Gas Vehicle Partnership, addressed the Board on Item 20, and explained that the California Natural Gas Vehicle Partnership is a sponsor of AB 302 and confirmed that the language has been amended to reflect a fleet as 15. He asked for the Board's support on the bill.

Mayor McCallon and Supervisor Rutherford noted the importance of including language that addresses essential public services.

MOVED BY KUEHL, SECONDED BY MITCHELL, APPROVE THE FOLLOWING POSITION ON LEGISLATION, BY THE FOLLOWING VOTE:

AYES: Ashley, Benoit, Cacciotti, Kuehl, Lyou, McCallon, Mitchell, Nelson, Parker and Robinson

NOES: Rutherford

ABSENT: Burke and Buscaino

**Agenda Item**

**Recommendation**

Proposed Legislation for Approval  
(Fleet Rules)

Support if Amended  
to Define a Fleet as  
15 Vehicles

Dr. Lyou noted that the Legislative Committee decided to not take a position on SB 49 and expressed the importance of the District being involved in this issue. He suggested a position of "Work with Author" be adopted.

Dr. Parker asked what the Legislative Committee direction was.

Mr. Nastri noted that while the recommended staff position was to work with the author, the Committee did not come to a consensus on a position.

MOVED BY LYOU, SECONDED BY CACCIOTTI, APPROVE THE FOLLOWING POSITION ON LEGISLATION, BY THE FOLLOWING VOTE:

AYES: Ashley, Benoit, Cacciotti, Kuehl, Lyou, Mitchell and Parker

NOES: McCallon, Nelson, Robinson and Rutherford

ABSENT: Burke and Buscaino

<b>Agenda Item</b>	<b>Recommendation</b>
SB 49 (De Leon) California Environmental, Public Health, And Workers Defense Act of 2017	Work with Author

MOVED BY LYOU, SECONDED BY MITCHELL, AGENDA ITEM 20, APPROVED, RECEIVING AND FILING THE LEGISLATIVE COMMITTEE REPORT AND APPROVING THE FOLLOWING POSITIONS ON LEGISLATION, BY THE FOLLOWING VOTE:

AYES: Ashley, Benoit, Cacciotti, Kuehl, Lyou, McCallon, Mitchell, Nelson, Parker, Robinson and Rutherford

NOES: None

ABSENT: Burke and Buscaino

<b>Agenda Item</b>	<b>Recommendation</b>
AB 1014 (Cooper) Diesel backup generators: health facility	Support
H.R. 1090 (Reed) Technologies for Energy Security Act of 2017	Support
Proposed Legislative Action for Approval (Toxic Air Monitoring Funding)	Approve

**Staff Presentation/Board Discussion**

25. Status Report on Permit Backlog Reduction Effort

Dr. Laki Tisopolus, DEO/Engineering and Permitting, gave a presentation on the status of the District's Permit Backlog Reduction Effort.

Supervisor Rutherford expressed appreciation for the work that has been done to reduce the backlog, and inquired what staff is doing to prepare for the outcome of the dissolution of the RECLAIM program.

Dr. Tisopulos explained that staff is carefully evaluating how to streamline the transition away from the RECLAIM program.

Mayor Cacciotti inquired about the strategy for recruitment and training of permitting staff.

Dr. Tisopulos replied that filling budgeted positions will continue to be a key priority in ensuring permits are processed in a timely manner. Regarding training, he mentioned that it can take two to three years to fully train an engineer to process permits, so that investment of time is something to consider.

Dr. Parker acknowledged that all permits issued are not the same, and therefore there should be different categories for processing them. The number of incoming applications is also important and should be tracked.

Dr. Tisopulos explained that staff is developing a template to automate permit processing for businesses whose permits are generally less complex, such as dry cleaners, gas stations and automotive spray booths. This automation will greatly increase the productivity of the permit processing team as more resources can be devoted to the more complex matters.

RECEIVED AND FILED; NO ACTION NECESSARY.

26. Report on Feasible Target Dates for Sunsetting RECLAIM Program

Dr. Phillip Fine, DEO/Planning, Rule Development and Area Sources, gave a presentation on the process that has been initiated for transitioning the RECLAIM program to command and control.

Dr. Parker inquired about the CEQA process for the transition. Dr. Fine stated that staff would analyze what type of CEQA document is needed.

Curt Coleman, Southern California Air Quality Alliance, noted that the Alliance has been participating in the RECLAIM working group meetings, acknowledged the complexities that are involved in the process, and expressed a commitment to continue working with District staff and the Board in an effort to minimize the impacts on the District's permitting resources and ensure the most effective timeline for phasing out the program is utilized.

In response to Supervisor Kuehl's request to report back to the Stationary Source Committee more frequently than every six months, Mr. Nastri confirmed that those reports can occur on a quarterly basis.

Dr. Lyou stressed the importance of prioritizing actions to obtain the most emission reductions as quickly as possible.

Councilwoman Mitchell noted the importance of ensuring no new facilities enter the RECLAIM program at this time. She asked staff to clarify what would happen to credits from facilities who leave the program.

Dr. Fine explained that how the credits will be handled is one of the complexities of the phase out that needs to be addressed.

Dr. Parker commented on the potential interim rulemaking regarding selling and trading of credits.

Mr. Nastri explained that evaluation is still underway to determine the best mechanism by which to deal with credits. He added that discussion regarding RECLAIM trading credits and emission reduction credits needs to occur with both CARB and U.S. EPA to ensure there are a sufficient number of credits available once the program has ended to allow for growth.

Mayor Pro Tem McCallon asked staff to make sure all facilities are aware of pending changes. Mr. Nastri responded that staff will continue to work with all the industries.

RECEIVED AND FILED; NO ACTION NECESSARY.

## **PUBLIC HEARING**

27. Amend Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II and Amend Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II

Tracy Goss, Planning and Rules Manager, gave the staff presentation on Item 27.

The public hearing was opened, and the following individuals addressed the Board on Item 27.

Susan Stark, Tesoro/Tesoro Logistics

Expressed appreciation to staff for reviewing their request regarding vapor socks; and noted their commitment to continue working with staff as well as U.S. EPA and CARB as rulemaking in that regard progresses.

Denver Martin, Cherry Aerospace

Noted that the existing provisions in Rule 219 are relative to permits for plasma cutting of stainless steels and other alloys only, while the proposed amendments will require a permit for cutting of all stainless steels. He stated that the way this amendment is written in an overly generic way that it can be narrowed to specific metal cutting operations that generate concerning levels of emissions.

Curtis Coleman, Southern California Air Quality Alliance

Commented that members of the association appreciated the work done by staff on this rule and the vapor sock issue; and noted their commitment to continue working with staff.

Rita Loof, RadTech

Expressed concerns about additional reporting requirements for printing and coating businesses; and noted that recordkeeping requirements for UV/EB facilities already exist under Rule 109. She explained that she submitted written comments recommending changes to the proposed rule language for VOC solvents. (Submitted Written Comments)

Doug DeLong, DDU Enterprises

Expressed concerns about businesses leaving the state due to burdensome regulations and reporting requirements. He stated that newer UV/EB/LED technology has resulted in reduced solvent-based pollution; and urged the Board to consider exempting businesses that use clean UV/EB/LED technology.

Dr. Gerry Bonetto, Printing Industries Association

Thanked staff for meeting with him and addressing his concerns regarding the proposed rule amendments as they relate to small businesses who use low VOC solvents. He urged the Board to consider clarifying the language for certification versus registration and to distribute an advisory to trade associations and industry explaining the new requirement.

Moustafa Elsherif

Noted that he is a former employee of the District, who now acts as a consultant for companies. He urged the Board to support clean air technologies and provide a complete exemption to the UV industry.

Natalia Baudin

Noted that she is a former employee of the District who worked in the Small Business Assistance Office for many years. She urged the Board to simplify the rule language for small businesses and provide exemptions for low VOC materials without requiring registration or fees.

There being no further public testimony on this item, the public hearing was closed.

Supervisor Nelson cautioned against placing unnecessary burdens on small businesses.

Mayor Cacciotti asked staff to clarify the paperwork that is being required for the certification.

Dr. Fine explained that the proposed rule sets forth a simplified, less-costly process for businesses utilizing UV/EB technology. The form is a one-page document which asks business owners to provide contact information along with a certification that they are eligible for the exemption.

Mayor Cacciotti asked that language be included on the form to make completion and submittal of the form as easy as possible. He also inquired about outreach to small businesses.

In regards to outreach methods, Mr. Nastri noted that staff will send an advisory and will provide a report to the Stationary Source Committee on what additional outreach methods can be employed to provide businesses with information regarding these rule changes.

Supervisor Rutherford stressed the need to focus on issues that will result in measurable outcomes and refrain from spending time on relatively small items.

Dr. Lyou commented on the need to write regulations that are easily understood by laypersons. He added that effort should be made to simplify these types of requirements for small businesses.

Mr. Nastri noted that the verification is being instituted in an effort to identify businesses who otherwise would have gone unnoticed by the District.

Councilman Robinson suggested that the form be a one-time submittal with updates as needed instead of an annual requirement.

Mr. Nastri confirmed that the rule could be modified to require an initial submittal. Staff would then send out correspondence on an annual basis reminding operators to submit a revised form only if there were any changes to report.

Mayor Cacciotti moved to approve staff's recommendation with the modification that the proposed Low VOC Material Annual Verification form be a one-time submittal with annual outreach to the affected industries.

MOVED BY CACCIOTTI, AND DULY SECONDED,  
AGENDA ITEM NO. 27 APPROVED, ADOPTING  
RESOLUTION NO. 17-8, DETERMINING THAT THE  
PROPOSED AMENDMENTS TO RULE 219 AND  
RULE 222 ARE EXEMPT FROM THE  
REQUIREMENTS OF CEQA, AND AMENDING RULE  
219 AND RULE 222, WITH THE MODIFICATIONS TO  
RULE 219 LANGUAGE AS DIRECTED BY THE  
BOARD AND NOTED BELOW REGARDING LOW-  
VOC VERIFICATION TO CHANGE FROM AN  
ANNUAL BASIS TO A ONE-TIME SUBMITTAL AND  
THEREAFTER ON AN AS-NEEDED BASIS TO  
REPORT CHANGES IN THE PREVIOUSLY  
PROVIDED INFORMATION, BY THE FOLLOWING  
VOTE:

AYES: Ashley, Benoit, Cacciotti, Kuehl, Lyou,  
Mitchell, Parker, Robinson and  
Rutherford

NOES: McCallon and Nelson

ABSENT: Burke and Buscaino

Based on the Board's expression of intent and its vote on this item, staff has revised the language of Rules 219 and 222, as follows:

219(h)(1)(E)(ii) within 60 days after start-up for new, relocated, or modified facilities, or by March 1, 2018 for facilities existing as of May 5, 2017, a low-VOC verification is submitted to the Executive Officer, in a format approved by the Executive Officer, to demonstrate compliance with material and cleanup solvent VOC concentration limits and the annual VOC emission limit.

219(l)(6)(F)(ii) within 60 days after start-up for new, relocated, or modified facilities, or by March 1, 2018 for facilities existing as of May 5, 2017, a low-VOC verification is submitted to the Executive Officer, in a format approved by the Executive Officer, to demonstrate compliance with material and cleanup solvent VOC concentration limits and the annual VOC emission limit.

219(l)(11)(F)(ii) within 60 days after start-up for new, relocated, or modified facilities, or by March 1, 2018 for facilities existing as of May 5, 2017, a low-VOC verification is submitted to the Executive Officer, in a format approved by the Executive Officer, to demonstrate compliance with material and cleanup solvent VOC concentration limits and the annual VOC emission limit.



Rule 222, Table I:

Printing and related coating and/or laminating equipment and associated dryers and curing equipment exempt from a written permit pursuant to Rule 219 (h)(1)(E), <u>unless a low-VOC verification is submitted to the Executive Officer in accordance with Rule 219 (h)(1)(E)(ii).</u>	<del>12/5/2008</del> <u>5/5/2017</u>
Coating or adhesive application, or laminating equipment exempt from a written permit pursuant to Rule 219 (l)(6)(F), <u>unless a low-VOC verification is submitted to the Executive Officer in accordance with Rule 219 (l)(6)(F)(ii).</u>	<del>12/5/2008</del> <u>5/5/2017</u>
Drying equipment such as flash-off ovens, drying ovens, or curing ovens associated with coating or adhesive application, or laminating equipment exempt from a written permit pursuant to Rule 219 (l)(11)(F), <u>unless a low-VOC verification is submitted to the Executive Officer in accordance with Rule 219 (l)(11)(F)(ii).</u>	<del>12/5/2008</del> <u>5/5/2017</u>

**PUBLIC COMMENT PERIOD – (Public Comment on Non-Agenda Items, Pursuant to Government Code Section 54954.3)**

Florence Gharibian, Del Amo Action Committee, spoke about the health hazards associated with TBAC and urged for further action on TBAC now as OEHHA does not plan to change the determination it has made regarding the cancer potency factor for the chemical.

**CLOSED SESSION**

The Board recessed to closed session at 12:20 p.m., pursuant to Government Code sections 54956.9(a) and 54956.9(d)(1) to confer with its counsel regarding pending litigation which has been initiated formally and to which the SCAQMD is a party. The actions are:

- Bahr v. U.S. EPA, United States Court of Appeals, Ninth Circuit, Case No. 14-72327;
- Communities for a Better Environment v. SCAQMD, Los Angeles Superior Court Case No. BS161399 (RECLAIM);
- People of the State of California, ex rel SCAQMD v. Exide Technologies, Inc., Los Angeles Superior Court Case No. BC533528; and
- In re: Exide Technologies, Inc., U.S. Bankruptcy Court, District of Delaware, Case No. 13-11482 (KJC) (Bankruptcy case).

Following closed session, General Counsel Kurt Wiese announced that a report of any reportable actions taken in closed session will be filed with the Clerk of the Board's office and made available to the public upon request.

### **ADJOURNMENT**

There being no further business, the meeting was adjourned by Kurt Wiese at 12:45 p.m.

The foregoing is a true statement of the proceedings held by the South Coast Air Quality Management District Board on May 5, 2017.

Respectfully Submitted,

Denise Garzaro  
Clerk of the Boards

Date Minutes Approved: \_\_\_\_\_

\_\_\_\_\_  
Dr. William A. Burke, Chairman

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### **ACRONYMS**

CARB = California Air Resources Board  
CEQA = California Environmental Quality Act  
DEO = Deputy Executive Officer  
FY = Fiscal Year  
MSRC = Mobile Source (Air Pollution Reduction) Review Committee  
NOx = Oxides of Nitrogen  
OEHHA = Office of Health Hazard Assessment  
PM = Particulate Matter  
RFP = Request for Proposals  
TBAC = Tetryl butyl acetate  
U.S. EPA = United States Environmental Protection Agency  
VOC = Volatile Organic Compound

BOARD MEETING DATE: June 2, 2017

AGENDA NO. 2

PROPOSAL: Set Public Hearings July 7, 2017 to Consider Adoption of and/or Amendments to SCAQMD Rules and Regulations:

- (A) Amend Rule 1118 - Control of Emissions from Refinery Flares  
Refineries are required to minimize their flaring under Rule 1118. Recent significant flaring events at some local refineries have shown that additional actions are needed to further reduce flaring emissions. PAR 1118 will incorporate parts of U.S. EPA's recently updated Refinery Sector Rule that prohibits the frequency of certain flaring events. PAR 1118 will also require facilities to prepare a Scoping Document to evaluate the feasibility of reducing or avoiding flaring events, update emission factors based on recent U.S. EPA guidance, remove the annual cap on mitigation fees paid for flaring, enhance current reporting requirements, and other administrative updates. (Reviewed: Stationary Source Committee, May 19, 2017)
  
- (B) Adopt Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants  
Proposed Rule 1466 establishes requirements to minimize fugitive particulate matter emissions from earth-moving activities at sites that the U.S. EPA, California Department of Toxics Substances Control, State Water Resources Control Board, or Regional Water Quality Control Board have determined that the soil contains arsenic, asbestos, cadmium, hexavalent chromium, lead, mercury, nickel, or polychlorinated biphenyl(s) that exceed levels of concern. Proposed Rule 1466 also includes criteria that allows the Executive Officer to identify sites that would be applicable to Proposed Rule 1466. The proposal will require monitoring of PM10 levels, dust control measures, notification to the SCAQMD when these activities are occurring and exceedance of the PM10 levels, and recordkeeping and signage requirements for the sites. (Reviewed: Stationary Source Committee, May 19, 2017)

The complete text of the proposed rule and amendments, staff reports and other supporting documents will be available from the District's Public Information Center, (909) 396-2001 and on the Internet ([www.aqmd.gov](http://www.aqmd.gov)) as of June 7, 2017.

**RECOMMENDED ACTION:**

Set Public Hearings July 7, 2017 to adopt Rule 1466 and amend Rule 1118.

Wayne Natri  
Executive Officer

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 [Back to Agenda](#)

BOARD MEETING DATE: June 2, 2017

AGENDA NO. 3

**PROPOSAL:** Execute Contract for Secondary Organic Aerosol Formation Study and Amend Technical Assistance Contracts for In-Use Emissions Testing for Heavy-Duty Vehicles

**SYNOPSIS:** Secondary organic aerosol (SOA) is an important component of suspended fine atmospheric particulate matter with significant environmental risks. Design of an effective emission control strategy to reduce the risks requires further understanding of the formation of SOA. As part of an in-use emissions test previously approved by the Board, staff is proposing to assess SOA concentrations from heavy-duty diesel and natural gas vehicles. These actions are to execute a contract with University of California Riverside CE-CERT to evaluate the SOA formation from heavy-duty diesel and natural gas vehicles and amend contracts with Gladstein, Neandross & Associates, LLC, and AEE Solutions, LLC, to provide technical assistance for in-use emissions testing for heavy-duty vehicles at a total cost not to exceed \$85,000, \$50,000 and \$50,000, respectively, from the Clean Fuels Fund (31).

**COMMITTEE:** Technology, May 19, 2017; Recommended for Approval

**RECOMMENDED ACTIONS:**

Authorize the Executive Officer using the Clean Fuels Fund (31) to:

1. Execute a contract with University of California Riverside CE-CERT to evaluate the SOA formation from heavy-duty diesel and natural gas vehicles in an amount not to exceed \$85,000; and

2. Amend contracts with the following entities to provide technical assistance for in-use emissions testing of heavy-duty vehicles in an amount not to exceed \$50,000, each for a total of \$100,000:
  - a. Gladstein, Neandross & Associates, LLC; and
  - b. AEE Solutions, LLC.

Wayne Natri  
Executive Officer

MMM:FM:NB:AAO

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## **Background**

On-road heavy-duty vehicles are currently one of the largest sources of NO<sub>x</sub> and PM emissions, which are major contributors to secondary organic aerosol (SOA) formation, along with some volatile and semi-volatile organic compounds. SOA formed from atmospheric reactions of organic compounds in the presence of NO<sub>x</sub> constitutes an important component of suspended fine atmospheric PM with significant environmental risks, such as respiratory and heart diseases as well as visibility degradation. Design of an effective emission control strategy to reduce SOA emissions and associated risks necessitates further understanding of the formation of SOA in the atmosphere.

In 2014, the Board approved a contract with the University of California Riverside (UCR) CE-CERT to investigate the physical and chemical composition of primary and secondary aerosols from diesel and gasoline direct injection (GDI) vehicles. Now that the SOA from diesel and GDI vehicles have been successfully characterized, similar efforts are being devoted to assess SOA formed by the reaction of gaseous and particulate emissions from heavy-duty diesel and natural gas vehicles. These efforts are further aligned with a recently Board-approved study to conduct in-use emissions testing, fuel usage profile characterization, and an impact assessment of current technology and alternative fuels on fuel consumption and emissions from 200 heavy-duty vehicles.

## **Proposal**

### **SOA Study**

Complementary to the ongoing emissions study to assess in-use emissions from heavy-duty vehicles, UCR CE-CERT proposes to investigate the physical and chemical composition of SOA formed by the reaction of gaseous and particulate emissions from heavy-duty diesel and natural gas vehicles. During the vehicle in-use emissions testing, UCR CE-CERT will collect samples of exhaust gases in a mobile chamber and transport the chamber to an atmospheric processes laboratory where the samples will be photochemically aged and characterized. During the aging process, UCR CE-CERT will also classify the aerosol and measure the size, mass and composition distribution of

the non-refractory aerosol as well as gaseous, particulate size distribution and black carbon emissions. The results of this study will provide valuable information on primary and secondary particulate emissions including SOA from in-use heavy-duty diesel and natural gas vehicles and facilitate a discussion on potential mitigation strategies.

#### Technical Assistance for In-Use Emissions Study

Gladstein, Neandross & Associates, LLC, (GNA) and AEE Solutions, LLC, will provide technical assistance for the in-use emissions study under existing Board-approved technical assistance contracts. Specifically, GNA and AEE Solutions will assist in the: 1) development of test vehicle selection, activity and emissions protocols, 2) recruitment of 200 heavy-duty test vehicles, 3) preparation of a technology assessment plan to identify the impact of current and near-future technology on engine performance, emissions and fuel usage, 4) identification of engine and aftertreatment issues and how to mitigate them, and 5) matching of vehicle technologies to vocations for which technology benefits can be maximized.

#### **Sole Source Justification**

Section VIII.B.2 of the Procurement Policy and Procedure identifies four major provisions under which a sole source award may be justified. This request for sole source award is made under provision B.2.d.: Other circumstances exist which in the determination of the Executive Officer require such waiver in the best interest of the SCAQMD. Specifically, these circumstances are B.2.d.(4): Level-of-effort expert consultation services; B.2.d.(6): Project requiring compatibility with existing specialized equipment; and B.2.d.(8): Research and development efforts with educational institutions or nonprofit organizations. UCR is an educational institution and CE-CERT is their research center with multidisciplinary resources to engage in diverse environmental and transportation research programs including advanced vehicle technologies and systems; emission measurements, analyses and controls; atmospheric measurements and modeling; and renewable energy. In addition, the proposed project requires specialized equipment for the collection and aging of exhaust gases, and UCR CE-CERT has designed and constructed a mobile chamber for the collection of exhaust gas samples as well as built and operated an atmospheric processes laboratory for aging the samples. GNA and AEE Solutions will provide technical assistance for the in-use emissions study under existing level-of-effort contracts.

#### **Benefits to SCAQMD**

The proposed projects are included in the *Technology Advancement Office Clean Fuels Program 2017 Plan Update* under “Fuel/Emissions Studies.” SOA formation studies will enhance our ability to model the formation of SOA from unburned diesel and natural gas as well as close the gap between atmospheric measurements and model predictions of PM concentrations. Models equipped with these SOA formation

processes could then be used to help formulate science-based policy for the reduction of ambient PM concentrations. In addition, the in-use emissions study will be used to measure the effectiveness of engine, fuel and aftertreatment technologies, improve emission inventories for air quality modeling and planning, and match vehicle technologies to vocations for which technology benefits can be maximized as well as to develop effective strategies toward achieving the federal ambient air quality standards.

### **Resource Impacts**

The total cost for the proposed projects will not exceed \$185,000 from the Clean Fuels Fund (31) summarized as follows:

<b>Proposed Projects</b>	<b>SCAQMD Funding (<i>requested</i>)</b>
SOA Study	\$85,000
Technical Assistance for In-Use Emissions Study	\$100,000

Sufficient funds are available from the Clean Fuels Program Fund, established as a special revenue fund resulting from the state-mandated Clean Fuels Program. The Clean Fuels Program, under Health and Safety Code Sections 40448.5 and 40512 and Vehicle Code Section 9250.11, establishes mechanisms to collect revenues from mobile sources to support projects to increase the utilization of clean fuels, including the development of the necessary advanced enabling technologies. Funds collected from motor vehicles are restricted, by statute, to be used for projects and program activities related to mobile sources that support the objectives of the Clean Fuels Program.



BOARD MEETING DATE: June 2, 2017

AGENDA NO. 4

**PROPOSAL:** Transfer and Appropriate Funding, Execute Contract, Authorize Release of RFQ and Issue Purchase Orders

**SYNOPSIS:** Field monitoring of PM and gravimetric analysis of PM samples continue to be an important part of ongoing efforts to better characterize air quality in the South Coast Basin. The effectiveness and efficiency of such monitoring and analysis efforts can be enhanced by upgrading existing laboratory facilities and investing in new and updated field platforms and equipment that would allow for more reliable instrument performance, rapid response and reporting. Consequently, this action is to upgrade the laboratory PM weighing room and purchase two state-of-the-art continuous Federal Equivalent Method monitors and two mobile air monitoring platforms. This action is to also transfer and appropriate up to \$323,500 into Science & Technology Advancement's FY 2016-17 and/or 2017-18 Budgets for the weighing room upgrade and equipment purchases and to transfer up to \$230,000 between Major Objects within Science & Technology Advancement's FY 2016-17 Budget to realign expenditures for the FY 2016-17 Enhanced Particulate Monitoring Program.

**COMMITTEE:** Administrative, May 12, 2017; Recommended for Approval

**RECOMMENDED ACTIONS:**

1. Transfer and appropriate up to \$323,500 into Science & Technology Advancement's FY 2016-17 and/or 2017-18 Budgets, Capital Outlays Major Object, from the U.S. EPA Section 103 Grant, AES Settlement Projects Fund (35), Supplemental CARB Subvention funds, BP ARCO Settlement Projects Fund (46) and Air Toxics Fund (15), as indicated in Table 1.
2. Authorize the Executive Officer to execute a contract with Willdan Energy Solutions to upgrade the laboratory PM weighing room in an amount not to exceed \$140,000 from Science & Technology Advancement's FY 2017-18 Budget, Capital Outlays Major Object, as listed in Table 2.

3. Authorize the Procurement Manager, in accordance with SCAQMD Procurement Policy and Procedure, to:
  - a. Issue a sole source purchase order with Teledyne API in an amount not to exceed \$65,500 for the purchase of two Federal Equivalent Method (FEM) continuous monitors for measuring PM2.5 and PM10, as listed in Table 3; and
  - b. Release an RFQ and based on the results of the RFQ, issue a subsequent purchase order for two mobile air monitoring platforms in an amount not to exceed \$118,000, as listed in Table 4.
4. Transfer up to \$230,000 in Science & Technology Advancement's FY 2016-17 Budget from Salaries and Employee Benefits Major Object (Org 44), Salaries Account, to Services and Supplies Major Object (Org 47), Temporary Agency Account, to realign expenditures for the FY 2016-17 Enhanced Particulate Monitoring Program.

Wayne Nastri  
Executive Officer

MMM:JCL:AP:AK

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## **Background**

Federal monitoring programs for air quality (i.e., PM2.5 monitoring, near-road monitoring and enhanced particulate monitoring) and special monitoring projects (e.g., Aliso Canyon and Paramount) represent some of the core activities conducted by staff. Furthermore, field monitoring and gravimetric analysis of PM samples continues to be an important part of ongoing efforts to better characterize air quality in the South Coast Basin. The effectiveness and efficiency of such monitoring and analysis efforts, however, can be enhanced by upgrading existing laboratory facilities and investing in new and updated field platforms and equipment that would allow for more reliable instrument performance, rapid response and reporting.

## **PM Weighing Room Upgrade**

In compliance with the U.S. EPA 40 CFR Part 50, the SCAQMD monitors for PM2.5 at approximately 20 locations within the South Coast Basin. These requirements also stipulate that the analysis must be conducted in an environmentally controlled weighing room. On an annual basis, approximately 5,000 filters are processed through the SCAQMD laboratory weighing room before and after distribution to field sites. Improvements are necessary to this room to protect against sample loss and ensure that temperature and relative humidity conditions are maintained within the strict parameters established by the U.S. EPA. An RFP (#P2016-23) to upgrade the PM2.5 weighing room was released in June 2016 in an amount not to exceed \$65,000, but no responses

were received. The RFP was re-released without a targeted dollar amount in November 2016, and one response was received.

#### Continuous PM Monitoring Equipment

Over the last few years, a number of continuous monitors for measuring PM2.5 and PM10 have been approved as Federal Equivalent Methods (FEMs). Data obtained using these continuous FEM instruments are eligible for comparison to U.S. EPA's health-based National Ambient Air Quality Standards (NAAQS) for PM and have the potential to replace several filter-based Federal Reference Method (FRM) samplers. FRMs are more resource intensive as they require the operation of a number of integrated samplers in the field as well as pre- and post-sampling laboratory analysis and provide only 24-hour average data. On the other hand, FEM monitors can provide hourly PM data in addition to 24-hour average concentrations that are required for NAAQS comparison. The SCAQMD received \$65,500 in supplemental funds (revenue was already recognized in the FY 2016-17 Budget) through CARB's subvention program for purchasing two near real-time continuous PM samplers to expand its PM2.5 and PM10 monitoring capabilities.

#### Mobile Air Monitoring Platforms

On June 6, 2014, RFQ #Q2014-11 was released for the purchase of one mobile air monitoring platform to carry and support a variety of air monitoring instruments and samplers. Several bids were evaluated, and the bid provided by Shelter One was selected as the most competitive and responsive to the RFQ specifications. In 2016, staff recognized the need for two additional mobile platforms, identical to the one authorized for purchase in 2014, to house and deploy instruments that can conduct discrete and near real-time measurements of air pollutants. At that time Shelter One agreed to accept the same price for the purchase of the two additional mobile platforms. Consequently, on December 2, 2016, the Board authorized the Procurement Manager to issue a prior-bid, last-price purchase order in an amount not to exceed \$118,000 for two mobile platforms. Ultimately, however, the quote received from Shelter One was higher than the original bid price so the purchase could not be completed.

#### Enhanced Particulate Monitoring Program

Since 2003, SCAQMD has provided enhanced particulate monitoring support including sample collection as part of a national monitoring program and will continue to do so for the foreseeable future. In July 2016, the Board recognized the remaining FY 2016-17 revenue for this Program and approved allocations among Major Objects within Science & Technology Advancement's FY 2016-17 Budget. Staff recommends transferring funds between Major Objects to better align FY 2016-17 expenditures.

## **Outreach**

In accordance with SCAQMD's Procurement Policy and Procedure, a public notice advertising the RFP (PM weighing room re-released RFP #P2016-23r) and inviting bids was published in the Los Angeles Times, the Orange County Register, the San Bernardino Sun, and Riverside County's Press Enterprise newspapers to leverage the most cost-effective method of outreach to the South Coast Basin.

Additionally, potential bidders may have been notified utilizing SCAQMD's own electronic listing of certified minority vendors. Notice of the RFP has been emailed to the Black and Latino Legislative Caucuses and various minority chambers of commerce and business associations, and placed on the Internet at SCAQMD's website (<http://www.aqmd.gov>).

## **Bid Evaluation**

When final bidding closed on December 14, 2016, the re-released RFP to upgrade the weighing room resulted in a single qualified bid from Willdan Energy Solutions in an amount not to exceed \$140,000. An internal evaluation panel, consisting of a Laboratory Manager, Principal Chemist and Senior Chemist, evaluated the single qualified bid. The panel's composition comprised two Caucasians and one Hispanic; three males. The bidder's references were verified and the panel deemed that the bid satisfactorily addressed all aspects of the RFP. Thus, staff proposes a contract award to Willdan Energy Solutions.

## **Proposal**

This action is to transfer and appropriate up to \$323,500 into Science & Technology Advancement's FY 2016-17 and/or FY 2017-18 Budgets for the weighing room upgrade and equipment purchases, from the U.S. EPA Section 103 Grant, AES Settlement Projects Fund (35), Supplemental CARB Subvention funds, BP ARCO Settlement Projects Fund (46) and Air Toxics Fund (15), as indicated in Table 1.

## **PM Weighing Room Upgrade**

Willdan Energy Solutions will engineer a robust solution to account for variability in external ambient temperature and humidity conditions in the laboratory weighing room. The circulation of air through the room will be designed and modeled to stabilize temperature and humidity levels, while ensuring the required conditions are met and are compliant with U.S. EPA regulations. To mitigate any sample loss during construction, Willdan will research and provide a temporary environmental control chamber for sample preparation and weighing. This action is to execute a contract with Willdan Energy Solutions in an amount not to exceed \$140,000 to upgrade the PM weighing room (see Table 2).

### Continuous PM Monitoring Equipment

Staff has been evaluating PM<sub>2.5</sub> continuous FEM monitors over the past several years, but none of the instruments evaluated so far has shown good comparability to more traditional (and more universally accepted) FRM methods. A number of new FEM instruments for measuring PM<sub>2.5</sub> and PM<sub>10</sub> in near real-time are now available, including PM mass monitors based on broadband spectroscopy recently commercialized by Teledyne API (models T640 and T640x). These instruments have high resolution, fast response, low power consumption, and based on a three-week evaluation conducted by staff, appear to be highly sensitive and precise as well as easy to operate and maintain. Staff proposes to purchase two of these newly commercialized FEM monitors for measuring PM<sub>2.5</sub> and PM<sub>10</sub> to evaluate their long-term performance and assess the possibility of using them for NAAQS determination at critical monitoring stations, thus potentially replacing existing labor and resource intensive FRM samplers. This action is to issue a sole source purchase order with Teledyne API in an amount not to exceed \$65,500 for the purchase of two FEM continuous monitors (see Table 3).

### Mobile Air Monitoring Platforms

Mobile platforms are self-contained mobile air quality monitoring shelters that can be rapidly deployed and are flexible in both monitoring capability and power requirements. Previous applications of similar mobile platforms or trailers by SCAQMD staff included monitoring of air pollutants near airports, freeways, metal processing facilities and other locations with limited accessibility. Both trailers will be able to utilize a variety of air monitoring and sampling instrumentation for the measurements of particle and gaseous pollutants, including air toxics. SCAQMD staff will install and change instrumentation depending on specific air monitoring needs. The Procurement Manager will release an RFQ to solicit competitive formal bids, in accordance with SCAQMD's Procurement Policy and Procedure, for the purchase of two trailers. Based on the results of the RFQ, the Procurement Manager will issue a purchase order for two mobile air monitoring platforms not to exceed \$118,000 (see Table 4).

### Enhanced Particulate Monitoring Program

This action is to transfer up to \$230,000 in Science & Technology Advancement's FY 2016-17 Budget from Salaries and Employee Benefits Major Object (Org 44), Salaries Account, to Services and Supplies Major Object (Org 47), Temporary Agency Account, to realign expenditures for the FY 2016-17 Enhanced Particulate Monitoring Program.

### **Sole Source Justification**

Section VIII, B.3 of the Procurement Policy and Procedure identifies four major provisions under which a sole source award may be justified. Specifically, this request for sole source awards is made under the provisions B.2.c (2): The desired services are available from only the sole-source based upon one or more of the following reasons: The project involves the use of proprietary technology. There is currently only one

vendor, Teledyne API, that produces PM2.5 and PM10 FEM continuous monitors (T640 model and T640x model) based on broadband spectrometry.

### **Outreach**

In accordance with SCAQMD's Procurement Policy and Procedure, a public notice advertising the RFQ (for mobile platforms) and inviting bids will be published in the Los Angeles Times, the Orange County Register, the San Bernardino Sun, and Riverside County's Press Enterprise newspapers to leverage the most cost-effective method of outreach to the South Coast Basin.

Additionally, potential bidders may be notified utilizing SCAQMD's own electronic listing of certified minority vendors. Notice of the RFQ will be emailed to the Black and Latino Legislative Caucuses and various minority chambers of commerce and business associations, and placed on the Internet at SCAQMD's website (<http://www.aqmd.gov>) where it can be viewed by making the selection "Grants & Bids."

### **Benefits to SCAQMD**

The proposed upgrades to the laboratory's PM weighing room will ensure that conditions are maintained within the strict parameters established by the U.S. EPA, hence minimizing PM sample and data loss. The purchase of two FEM monitors based on broadband spectroscopy for measuring PM2.5 and PM10 will allow staff to evaluate their long-term performance and assess the possibility of using them for NAAQS determination at critical monitoring stations such as the Mira Loma and Rubidoux sites. The purchase of two additional monitoring platforms to house and deploy integrated and near real-time instruments will enhance current monitoring capabilities for emergency situations and special monitoring activities such as those currently being conducted in the City of Paramount and other areas of the Basin.

### **Resource Impacts**

The transfer and appropriation for the contract award and equipment purchases will not exceed \$323,500 as indicated in Tables 1-4 and as follows: \$65,000 from the EPA Section 103 PM2.5 Grant; \$75,000 from the AES Settlement Projects Fund (35); \$65,500 from Supplemental CARB Subvention funds; \$59,000 from the BP ARCO Settlement Projects Fund (46); and \$59,000 from the Air Toxics Fund (15). The use of the AES Settlement Projects Fund (35) is not restricted by the applicable statutes or settlement agreement. However, while in the past the Board had restricted the use of these funds for fleet rules, they have the authority to direct use of the monies in the AES Settlement Projects Fund (35) for other priorities and have previously done so (i.e., December 2016 action to use funds to procure other laboratory equipment). Finally, the contract with Willdan Energy Solutions will not exceed \$140,000 as indicated in Table 2.

U.S. Government funding, previously recognized and appropriated, will fully support the Enhanced Particulate Monitoring Program. The transfer from Salaries and Employee Benefits Major Object (Org 44), Salaries Account, to Services and Supplies Major Object (Org 47), Temporary Agency Account, within Science & Technology's FY 2016-17 Budget to realign expenditures for FY 2016-17 Program will not exceed \$230,000.

**Attachments**

Table 1 – Proposed Appropriations and Transfers

Table 2 – Award of Contract

Table 3 – Proposed Purchase through Sole Source Purchase Order

Table 4 – Proposed Purchase through RFQ Process

**Table 1**  
**Proposed Appropriations and Transfers**

<b>Fiscal Year</b>	<b>Item</b>	<b>Funding Source</b>	<b>Action</b>	<b>Amount</b>
2017-18	Weighing Room	U.S. EPA Section 103 Grant	Appropriate	\$65,000
		AES Settlement Projects Fund (35)	Transfer/ Appropriate	\$75,000
2016-17	Two Teledyne Samplers	Supplemental CARB Subvention	Appropriate	\$65,500
2017-18	Two Mobile Air Monitoring Platforms	BP ARCO Settlements Projects Fund (46) and Air Toxics Fund (15)	Transfer/ Appropriate	\$118,000 (\$59,000 per fund)
				<b>Total: \$323,500</b>

**Table 2**  
**Award of Contract**

Description	Quantity	Funding Source	Estimated Cost
PM Weighing Room Upgrade	1	AES Settlement Projects Fund (35)	\$75,000
		U.S. EPA Section 103 Grant	\$65,000*
*This grant funding recognized in July 8, 2016 Board Letter (#12)			<b>Total: \$140,000</b>

\*This grant funding recognized in July 8, 2016 Board Letter (#12)

**Table 3**  
**Proposed Purchase through Sole Source Purchase Order**

Description	Quantity	Funding Source	Estimated Cost
PM2.5 and PM10 monitor**	1	Supplemental CARB Subvention funds	\$26,000
PM2.5 and PM10 monitor***	1		\$39,500
**FEM approved method for PM2.5 only ***FEM approved method for both PM2.5 and PM10			<b>Total: \$65,500</b>

\*\*FEM approved method for PM2.5 only

\*\*\*FEM approved method for both PM2.5 and PM10



**Table 4**  
**Proposed Purchase through RFQ Process**

Description	Quantity	Funding Source	Estimated Cost
Mobile Air Monitoring Platforms	2	BP ARCO Settlement Projects Fund (46) and the Air Toxics Fund (15) ****	\$118,000 (\$59,000 per fund)

\*\*\*\*As originally requested in the December 2, 2016 Board letter (#4)

BOARD MEETING DATE: June 2, 2017

AGENDA NO. 5

PROPOSAL: Approve Awards for Electric School Buses

SYNOPSIS: At its December 2, 2016 meeting, the Board issued a Program Announcement to solicit applications for electric school buses. This action is to approve awards for electric school buses and associated charging infrastructure in an amount not to exceed \$8,844,000 from the Carl Moyer Program AB 923 Fund (80).

COMMITTEE: Technology, April 21, 2017; Recommended for Approval

**RECOMMENDED ACTIONS:**

Authorize the Chairman to execute the following contracts in an amount not to exceed \$8,844,000 from the Carl Moyer Program AB 923 Fund (80):

1. Anaheim Elementary School District for up to 2 electric school buses and associated charging infrastructure in an amount not to exceed \$536,000;
2. Anaheim Union High School District for up to 2 electric school buses and associated charging infrastructure in an amount not to exceed \$536,000;
3. Baldwin Park Unified School District for up to 2 electric buses and associated charging infrastructure in an amount not to exceed \$536,000;
4. Bassett Unified School District for up to 2 electric school buses and associated charging infrastructure in an amount not to exceed \$536,000;
5. Bellflower Unified School District for up to 2 electric school buses and associated charging infrastructure in an amount not to exceed \$536,000;
6. Coachella Valley Unified School District for up to 2 electric school buses and associated charging infrastructure in an amount not to exceed \$536,000;
7. Covina Valley Unified School District for 1 electric school bus and associated charging infrastructure in an amount not to exceed \$268,000;
8. Fontana Unified School District for up to 2 electric school buses and associated charging infrastructure in an amount not to exceed \$536,000;
9. Jurupa Unified School District for up to 2 electric school buses and associated charging infrastructure in an amount not to exceed \$536,000;
10. Los Angeles Unified School District for up to 2 electric school buses and associated charging infrastructure in an amount not to exceed \$536,000;
11. Los Angeles Leadership Primary Academy for 1 electric school bus and associated charging infrastructure in an amount not to exceed \$268,000;

12. Lynwood Unified School District for up to 2 electric school buses and associated charging infrastructure in an amount not to exceed \$536,000;
13. Magnolia School District for up to 2 electric school buses and associated charging infrastructure in an amount not to exceed \$536,000;
14. Montebello Unified School District for up to 2 electric school buses and associated charging infrastructure in an amount not to exceed \$536,000;
15. Mountain View School District for up to 2 electric school buses and associated charging infrastructure in an amount not to exceed \$536,000;
16. Rialto Unified School District for up to 2 electric school buses and associated charging infrastructure in an amount not to exceed \$536,000;
17. Savanna School District for up to 2 electric school buses and associated charging infrastructure in an amount not to exceed \$536,000; and
18. Today's Fresh Start Charter School for 1 electric school bus and associated charging infrastructure in an amount not to exceed \$268,000.

Wayne Nastri  
Executive Officer

MMM:FM:VW:RSG

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## **Background**

Since the commencement of the Lower-Emission School Bus Program in 2001, SCAQMD has provided over \$280 million in state and local funds to replace over 1,600 highly polluting school buses with alternative fuel buses and to retrofit over 3,300 school buses with particulate traps.

At its December 2, 2016 meeting, the Board approved the issuance of Program Announcement (PA) #PA2017-01 to provide funds to public school districts to purchase zero emission, battery-operated electric school buses. These buses must be either Type C or Type D, included on CARB's approved list, have a minimum battery range of 60 miles from a single charge, and have a battery warranty of at least five years. Consistent with CARB Mail-Out #MSC 15-19, eligible applicants will not be required to replace and scrap an older school bus when they purchase a new electric school bus. When the PA closed on February 10, 2017, applications were received from 51 public school districts and 2 private charter schools requesting a total of 295 electric school buses.

## **Outreach**

In accordance with SCAQMD's Procurement Policy and Procedure, a public notice advertising the PA and inviting bids was published in the Los Angeles Times, the Orange County Register, the San Bernardino Sun, and Riverside County's Press

Enterprise newspapers to leverage the most cost-effective method of outreach to the South Coast Basin.

Additionally, potential bidders may have been notified utilizing SCAQMD's own electronic listing of certified minority vendors. Notice of the PA was emailed to the Black and Latino Legislative Caucuses and various minority chambers of commerce and business associations, and placed on the Internet at SCAQMD's website (<http://www.aqmd.gov>).

### **Proposal**

This action is to execute contracts with 16 public school districts and 2 charter schools, as outlined in Table 1, for the purchase of 33 electric school buses and associated charging infrastructure in an amount not to exceed \$8,844,000 from the Carl Moyer Program AB 923 Fund (80).

Given the strong response to the PA from school districts, staff proposes to award funding only to schools located in disproportionately impacted areas based on the criteria used for the Carl Moyer Program as described below:

- a. Poverty Level: An area where at least 10 percent of the population falls below the Federal poverty level based on the 2008-2012 American Community Survey (ACS) data;
- b. PM2.5 Exposure: An area with the highest 15 percent of PM2.5 concentration measured within a 2 km grid. The highest 15 percent of PM2.5 concentration is 11.1 micrograms per cubic meter and above, on an annual average;
- c. Air Toxics Exposure: An area with a cancer risk of 894 in a million and above (based on MATES IV estimates) will be eligible to be ranked in this category.

The maximum score is comprised of 40 percent for poverty level and 30 percent each for PM and toxic exposures. The specific garage location and the entire zip code where the school buses will be parked were chosen for this evaluation. Schools with a score of greater than 0.4, corresponding to approximately 68% of that entire zip code being in disproportionately impacted area, are recommended for awards.

Staff proposes to award two electric school buses to all the schools in disproportionately impacted areas with the exception of three schools who requested funding for only one electric school bus. The proposed funding distribution per county is listed below, which is also roughly proportional to the 2010 census for county population distribution.

- |                          |     |
|--------------------------|-----|
| • Los Angeles County:    | 52% |
| • Orange County:         | 24% |
| • Riverside County:      | 12% |
| • San Bernardino County: | 12% |

There are currently two Type C electric school buses that are approved by CARB. Any of these buses and any other electric school bus to be approved by CARB before the placement of the purchase orders will be eligible for funding.

This will also be the first time that, in close cooperation, the SCAQMD and CARB will be jointly funding such an incentive program. As agreed with CARB, up to \$368,000, including sales tax, would be allowed as the full price of an electric school bus from CARB's approved list. Through the Hybrid and Zero Emission Truck and Bus Voucher Incentive Project (HVIP), CARB is providing up to \$120,000 per electric school bus that operates in disadvantaged communities. To be eligible for funding, subsequent to the SCAQMD Board approval and prior to contract execution, the applicant must apply, and get approval, for HVIP funds from CARB. The SCAQMD funds will then be used to pay for the balance of the electric school bus not exceeding \$248,000, after subtracting the HVIP voucher amount. In addition, the SCAQMD will provide up to \$20,000 per bus for charging infrastructure. In case schools are not successful in receiving HVIP funds but are still interested in purchasing the buses solely with the SCAQMD funding award, contracts will be executed up to the approved amounts.

### **Benefits to SCAQMD**

The successful implementation of this program will provide less-polluting and safer school transportation for school children and will reduce public exposure to toxic diesel particulate matter emissions. In addition, these awards comply with AB 1390 requirements, such that it would reduce air pollution in low-income, high-diesel and high-PM10 exposure areas as well as enhance the objectives of the Environmental Justice and Children's Health Initiatives adopted by the SCAQMD Board.

### **Resource Impacts**

Total funding for the recommended awards shall not exceed \$8,844,000 from the Carl Moyer Program AB 923 Fund (80).

### **Attachment**

Table 1: Recommended Awards for Electric School Buses and Charging Infrastructure

**Table 1: Recommended Awards for Electric School Buses  
and Charging Infrastructure**

<b>Applicant</b>	<b>County</b>	<b>No. of Buses</b>	<b>Bus Award</b>	<b>Infrastructure</b>	<b>Total Award</b>
Baldwin Park	LA	2	\$496,000	\$40,000	\$536,000
Bassett	LA	2	\$496,000	\$40,000	\$536,000
Bellflower	LA	2	\$496,000	\$40,000	\$536,000
Covina Valley	LA	1	\$248,000	\$20,000	\$268,000
Los Angeles	LA	2	\$496,000	\$40,000	\$536,000
Los Angeles Leadership Primary Academy	LA	1	\$248,000	\$20,000	\$268,000
Lynwood	LA	2	\$496,000	\$40,000	\$536,000
Mountain View	LA	2	\$496,000	\$40,000	\$536,000
Montebello	LA	2	\$496,000	\$40,000	\$536,000
Today's Fresh Start	LA	1	\$248,000	\$20,000	\$268,000
<b>Total Los Angeles Co.</b>		<b>17</b>	<b>\$4,216,000</b>	<b>\$340,000</b>	<b>\$4,556,000</b>
Anaheim Elementary	OR	2	\$496,000	\$40,000	\$536,000
Anaheim Union High	OR	2	\$496,000	\$40,000	\$536,000
Magnolia	OR	2	\$496,000	\$40,000	\$536,000
Savanna	OR	2	\$496,000	\$40,000	\$536,000
<b>Total Orange Co.</b>		<b>8</b>	<b>\$1,984,000</b>	<b>\$160,000</b>	<b>\$2,144,000</b>
Coachella Valley	RV	2	\$496,000	\$40,000	\$536,000
Jurupa	RV	2	\$496,000	\$40,000	\$536,000
<b>Total Riverside Co.</b>		<b>4</b>	<b>\$992,000</b>	<b>\$80,000</b>	<b>\$1,072,000</b>
Fontana	SB	2	\$496,000	\$40,000	\$536,000
Rialto	SB	2	\$496,000	\$40,000	\$536,000
<b>Total San Bernardino Co.</b>		<b>4</b>	<b>\$992,000</b>	<b>\$80,000</b>	<b>\$1,072,000</b>
<b>Total, All Applicants</b>		<b>33</b>	<b>\$8,184,000</b>	<b>\$660,000</b>	<b>\$8,844,000</b>

BOARD MEETING DATE: June 2, 2017

AGENDA NO. 6

**PROPOSAL:** Reallocate Funding Sources for Projects Under Carl Moyer Program

**SYNOPSIS:** On October 7, 2016, the Board awarded contracts under the FY 2015-16 “Year 18” Carl Moyer Program, including two contracts executed for \$249,050 to repower a marine vessel and \$627,873 to replace one off-road agricultural equipment from the Carl Moyer Program Fund (32). Subsequently, staff identified \$225,136 in turn-back funds from withdrawn projects from a 2012 Diesel Emissions Reduction Act (DERA) grant. This action is to amend both contracts, substituting \$225,136 in Carl Moyer funds with the unencumbered portion of the 2012 DERA grant in the Advanced Technology, Outreach and Education Fund (17).

**COMMITTEE:** Technology, May 19, 2017; Recommended for Approval

**RECOMMENDED ACTION:**

Authorize the Chairman to amend contracts with the following contractors:

1. Matthew Potter dba Mako Matt’s Marine for the repower of a marine vessel to substitute \$43,920 of the \$249,050 contract from the Carl Moyer Program Fund (32) with the DERA funds in the Advanced Technology, Outreach and Education Fund (17).
2. Organic Depot, LLC, for the replacement of one off-road agricultural equipment to substitute \$181,216 of the \$627,873 contract from the Carl Moyer Program Fund (32) with the DERA funds in the Advanced Technology, Outreach and Education Fund (17).

Wayne Nastri  
Executive Officer

**Background**

On October 7, 2016, the Board awarded contracts for on- and off-road vehicles and engines under the FY 2015-16 “Year 18” Carl Moyer Program including contracts for Matthew Potter dba Mako Matt’s Marine and Organic Depot, LLC. Subsequently, a portion of funds from a 2012 DERA grant, which the Board had approved on February 5, 2016, to fund various repower and replacement projects for marine vessels and off-road equipment, was unencumbered from withdrawn projects.

**Proposal**

This action is to amend contracts with Matthew Potter dba Mako Matt’s Marine and Organic Depot, LLC, substituting \$225,136 from the Carl Moyer Program Fund (32), which consists of \$43,920 of Matthew Potter’s award and \$181,216 of Organic Depot’s award, with the 2012 DERA grant funds in the Advanced Technology, Outreach and Education Fund (17). The Carl Moyer Program funds will be reallocated to fund other projects under the Carl Moyer Program.

**Benefits to SCAQMD**

The successful implementation of these projects using U.S. EPA’s DERA grant and Carl Moyer Program funds will provide direct benefits in emission reductions for NOx, PM and associated ozone, as required by these programs.

**Resource Impacts**

A total of \$225,136 from the Carl Moyer Program Fund (32) will be substituted with the recently unencumbered 2012 DERA grant funds, previously recognized in the Advanced Technology, Outreach and Education Fund (17).



BOARD MEETING DATE: June 2, 2017

AGENDA NO. 7

**PROPOSAL:** Extend Contract for Targeted YouTube Videos and Banner Ads for the 2017-18 Check Before You Burn Program

**SYNOPSIS:** The contract with Google to help promote the Check Before You Burn program (CBYB) is currently set to expire on June 30, 2017. This action is to authorize the Executive Officer to extend the current contract with Google, Inc. for \$250,000, for the 2017-18 CBYB program. This contract will be executed from the Rule 1309.1 Priority Reserve Fund (36).

**COMMITTEE:** Administrative, May 12, 2017; Recommended for Approval

**RECOMMENDED ACTION:**

Authorize the Executive Officer to extend SCAQMD's contract with Google, Inc. for targeted outreach for the Check Before You Burn program's 2017-18 season in an amount not to exceed \$250,000 from the Rule 1309.1 Priority Reserve Fund (36).

Wayne Natri  
Executive Officer

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**Background**

SCAQMD's Check Before You Burn program and its regulatory framework, Rule 445 – Wood Burning Devices, are key measures in the agency's Air Quality Management Plan to achieve the federal health-based air quality standard for PM<sub>2.5</sub>. Check Before You Burn and Rule 445 seek to reduce PM<sub>2.5</sub> emissions from wood burning in residential fireplaces from November 1 through the end of February on days when unhealthy air quality is forecast.

The 2016-17 Check Before You Burn season included targeted outreach through Google, Inc. using YouTube videos and digital display ads to enhance the media, advertising and public outreach campaign. Such outreach is highly targeted by Google using search words, ZIP codes and other demographics. Similar techniques can be utilized for digital display campaigns. The Google outreach component was recommended for the Check Before You Burn program after results of a pilot program in the fall of 2016 showed this approach to be highly successful.

At the conclusion of the 2016-17 Check Before You Burn season, the Google advertising campaign had achieved:

- More than 110 million impressions, meaning each time your ad is shown on a search result page or other site on the Google Network;
- More than 2.9 million interactions, meaning clicks on ads or videos watched;
- An average cost per interaction of approximately \$0.07; and
- Nearly 20 percent of viewers watching the entire pre-roll video.

For the 2017-18 Check Before You Burn program, there is a need to continue to promote the program through Google utilizing YouTube videos and digital display ads to enhance the overall media, advertising and public outreach campaign for the upcoming season.

### **Sole Source Justification**

Section VIII.B.2 of the Procurement Policy and Procedure identifies four major provisions under which a sole source award may be justified. This request for sole source award is made under provision B.2.c.: The desired services are available from only the sole source. Specifically, B.2.c.(1): The unique experience and capabilities of the proposed contractor or contractor team.

Consumers are increasingly turning to digital media for their news and information. In turn, companies are making increasing use of digital advertising to promote their brand and services. Google is a leader in assisting companies with online advertising and its ownership of YouTube positions the company as a leader in online video messaging. For these reasons, Google remains uniquely qualified to assist SCAQMD with outreach for the Check Before You Burn program, utilizing online digital advertising using video pre-roll ads and website image ads. In addition, a Google digital strategist who is up-to-date on the latest digital advertising trends will assist SCAQMD to craft a strategy to reach its target audience; set goals to measure progress; launch the online advertising campaign and provide hands-on personalized support throughout the process

### **Proposed Budget**

The overall budget for the proposed project is \$250,000 for a sole-source contract with Google, Inc.

### **Resource Impacts**

Funding will be provided from Rule 1309.1 Priority Reserve Funds (Fund 36) to implement the 2017-18 Check Before You Burn outreach program.

BOARD MEETING DATE: June 2, 2017

AGENDA NO. 8

**PROPOSAL:** Transfer Funds and Issue Purchase Orders for Necessary Software and Hardware to Develop an Enterprise Geographical Information System

**SYNOPSIS:** A recent strategic planning effort for an Enterprise Geographical Information System (EGIS) identified a need to use GIS more broadly across the diverse business processes at SCAQMD. In order to implement the recommended EGIS, SCAQMD needs to update the current spatial IT infrastructure, storage environment and delivery of geospatial services to serve a growing need for geospatial data and to enable integration with other supported business systems and databases. This action is to transfer funds within the Information Management (IM) FY 2016-17 Budget, and to issue purchase orders for the acquisition of computer hardware and software necessary for the development of an EGIS at a total cost not to exceed \$80,000. Funds are available in IM's FY2016-17 Budget.

**COMMITTEE:** Administrative Committee, May 12, 2017, Recommended for Approval

**RECOMMENDED ACTIONS:**

1. Transfer \$80,000 to the Information Management FY 2016-17 Budget, Capital Outlays Major Object from the Information Management FY 2016-17 Budget, Services and Supplies Major Object;
2. Authorize the Procurement Manager to issue a sole-source purchase order to Esri for a not-to-exceed amount of \$66,000 to purchase the following software:
  - a. Two (2) ArcGIS Enterprise Standard (Windows) Up to Four Cores Licenses
  - b. Two (2) ArcGIS Enterprise Standard (Windows) Up to Four Cores Staging Server Licenses;

3. Authorize the Procurement Manager to purchase two (2) Kemp Virtual Load Balancers (VLM-2000), including operating systems, from the current approved vendor list at a cost not to exceed \$14,000.

Wayne Natri  
Executive Officer

JCM:MAH:OSM:agg

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### **Background**

SCAQMD's website incorporates a number of online maps to display information useful to the public, researchers, and the regulated community, including the Air Quality Map, the Check Before You Burn map, the FIND map, the MATES IV interactive risk map, the AB 2588 interactive risk map, the Rule 1113 exemption area locator map, and a special monitoring map with data display. Currently, there are seven interactive and display maps on our external website rendering specific data, each for a single purpose; in addition, two departments have developed in-house GIS applications for specific uses.

SCAQMD primarily uses GIS for information distribution and data visualizations. Geospatial data is processed and delivered through a variety of technologies, including MapDotNet6.5, MapDotNet9.1, Bing Maps, and ArcGIS. The current maps have evolved over time to satisfy certain departmental needs; however, the agency is limited by the lack of a comprehensive, enterprise system approach.

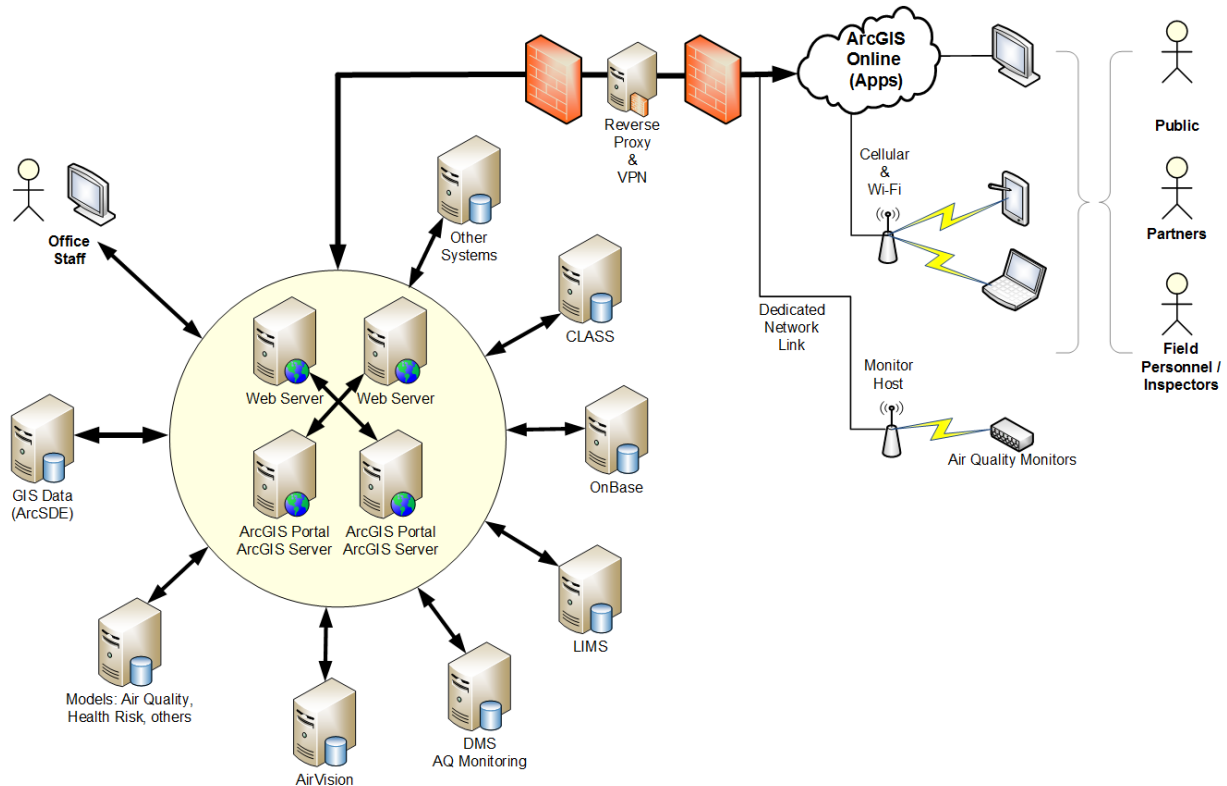
SCAQMD engaged Psomas to perform the strategic planning for a Geographic Information System (GIS) at the District-wide level. Their analysis identified a need to use GIS more broadly across the diverse business processes at SCAQMD by providing increased access to GIS information through integration with existing business systems, accessing information through web and mobile applications, and simplifying GIS tools. The Enterprise GIS System Design prepared by Psomas presents an enhanced GIS system concept for SCAQMD that addresses these needs. It features a consolidated, centralized, enterprise GIS database, internal web mapping capability, and strong integration with other enterprise systems, including OnBase, CLASS, and AirVision.

In order to implement the recommended enterprise-wide GIS system, SCAQMD will need to update the current spatial IT infrastructure, storage environment, and delivery of geospatial services to serve a growing need for geospatial data and enable integration with other supported business systems and databases.

## Proposal

In their Enterprise GIS Implementation Plan, Psomas provided a concept for deploying GIS at SCAQMD, shown in Figure 1.

**Figure 1. EGIS System Concept**



The recommended system design has the following attributes:

- Expanded use of Esri software to create an enterprise GIS database and web application server framework;
- A robust and reliable GIS mapping and application server cluster that integrates with SCAQMD's other core business systems; and
- A versioned production enterprise geodatabase to store and manage GIS datasets.

Psomas has recommended that SCAQMD continue using Esri software for GIS for the following reasons:

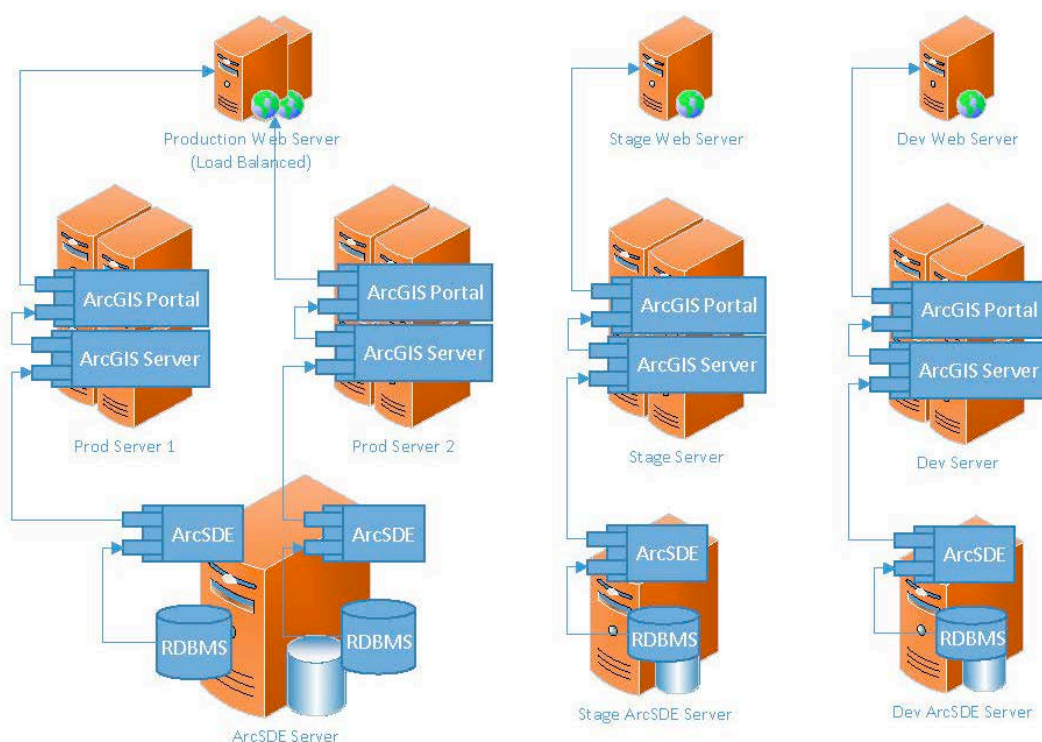
- Esri's ArcGIS is the dominant GIS software in the key industries that are most relevant to the agency, including: local government, research, and regulatory agencies, with a world-wide market share of 43% (and 80% share of the entire federal, state, and local government U.S. market).
- Esri is a closely-held, privately-owned, company that has been consistently profitable for decades and is committed to reinvesting in research and

development. Esri has been the overall leader for decades and represents long-term viability as a GIS platform; and

- Esri has been successful in expanding the application of GIS into the functions of local government, utilities, and a wide-array of other industries making ArcGIS the most comprehensive software platform available to the SCAQMD through readily-available templates and solutions, a rich web application development framework, spatial analysis and data management tools, online user and developer documentation, and educational support.

The recommended implementation configuration (Figure 2) consists of a three-tiered environment for development, staging/testing, and production. Having this environment isolation improves the management of applications and data so that production systems are reliable, test environments provide verification of the application functions and performance before advancing to production, and the development environment isolation keeps early code away from testing and production.

**Figure 2. GIS Implementation Configuration**



The hardware and software necessary for this EGIS configuration includes additional load balancing servers to modulate map and data requests, additional database servers for expanded data storage needs, Esri software components, and necessary support software as detailed in Table 1.

**Table 1. Additional Hardware and Software Necessary for  
Enterprise GIS Implementation**

Item Description	Quantity	Unit Price (\$)	Total (\$)	Total with Tax (\$)
Kemp Virtual Load Balancers (VLM-2000), including Windows operating system	2	6,000	12,000	14,000
ArcGIS Enterprise Standard (Windows) Up to Four Cores Licenses	2	20,000	40,000	44,000
ArcGIS Enterprise Standard (Windows) Up to Four Cores Staging Server Licenses	2	10,000	20,000	22,000
<b>Total</b>			<b>72,000</b>	<b>80,000</b>

This action proposes to transfer funds within the Information Management FY 2016-17 Budget, and issue purchase orders for an amount not to exceed \$80,000 for the purchase of computer hardware and software necessary to develop an Enterprise Geographical Information System. Total capital outlay cost is not to exceed \$80,000, including applicable taxes.

**Sole Source Justification**

Section VIII.B.2 of the Procurement Policy and Procedure identifies circumstances under which a sole source purchase award may be justified. This request for a sole source purchase from Esri are made under provision VIII.B.2.a. Esri has already provided a cost quote and the effort required to prepare a bid request from re-sellers will exceed any possible savings that could be gained.

**Resource Impacts**

Sufficient funds are available in Information Management's FY 2016-17 Budget.

BOARD MEETING DATE: June 2, 2017

AGENDA NO. 9

**PROPOSAL:** Appropriate Funds and Authorize Amending Contracts with Outside Counsel and Specialized Legal Counsel and Services

**SYNOPSIS:** Legal is currently being assisted in environmental lawsuits by outside law firms and in other matters requiring specialized legal counsel and services, including on-going litigation. This action is to appropriate \$250,000 from Undesignated Fund Balance to Legal's FY 2016-17 Budget and amend contracts to expend these funds with prequalified counsel approved by the Board as well as specialized legal counsel and services.

**COMMITTEE:** Administrative, May 12, 2017; Recommended for Approval

**RECOMMENDED ACTIONS:**

1. Appropriate \$250,000 from Undesignated (Unassigned) Fund Balance to Legal's FY 2016-17 Budget, Services and Supplies Major Object, Professional and Special Services.
2. Authorize the Chairman or the Executive Officer, depending on whether the amount exceeds \$75,000, to amend or initiate contracts with legal counsel handling existing matters, as well as prequalified counsel approved by the Board, and specialized legal counsel and services, as the need arises. This action will bring the total amount of outside counsel costs approved by FY 2016-17 to \$1,529,500.

Wayne Natri  
Executive Officer



**Background**

The FY 2016-17 Budget for Legal included \$279,500 for litigation expenses in environmental law cases and specialized legal counsel and services. Periodically, the Board has authorized additional amounts. However, the total amount currently allocated will not cover current and anticipated costs of legal counsel and specialized counsel and services.

Due to the complexity of certain cases and the number of matters handled by specialized legal counsel and related services, the SCAQMD will require an additional amount of up to \$250,000 for these services. Monies will be expended on lawsuits and legal proceedings, including the civil penalties claims against Exide; defending an appeal filed by Communities for a Better Environment to a CEQA challenge of a project by Phillips 66 at its Los Angeles/Carson Refinery that will reduce ship emissions; retaining expert witnesses to assist with an abatement proceeding involving the PBF Refinery in Torrance; defending environmentalists' challenge to the December 2015 RECLAIM amendments; and assisting with responses to comments on the Environmental Impact Report (EIR) for the Tesoro Los Angeles Refinery Integration Project and defending litigation if this project is approved. In the Phillips 66 case we will be reimbursed for litigation costs once the case is closed. Through March of this year, litigation costs on the Phillips 66 matter have totaled \$303,463.58. Also, any litigation expenses to defend the Tesoro EIR, if it is approved will be reimbursed. However, at the current rate of expenditures, an additional \$250,000 will be needed to cover costs in April through June 2017. Accordingly, Legal is requesting an appropriation of funds in the amount of \$250,000, for a total expected expenditure of \$1,529,500 this fiscal year, which is approximately \$1.2 million less than last fiscal year.

**Proposal**

In order to defend on-going and threatened litigation, it is necessary to appropriate additional funds for expenditure by outside counsel. It is expected that on-going lawsuits as well as matters requiring specialized legal counsel will require an additional \$250,000 to be appropriated to prequalified counsel approved by the Board and with specialized legal counsel and services, as the need arises.

**Resource Impacts**

Sufficient funds will be available in Legal's FY 2016-17 Budget upon approval of this Board letter.



[Back to Agenda](#)

BOARD MEETING DATE: June 2, 2017

AGENDA NO. 10

**PROPOSAL:** Approve Contract Award and Modification and Issue Solicitations  
Approved by MSRC

**SYNOPSIS:** As part of their FYs 2016-18 AB 2766 Discretionary Fund Work Program, the MSRC approved a new contract under the Major Event Center Transportation Program. The MSRC also approved a modification to a contract under the Signal Synchronization Partnership Program as part of their FYs 2012-14 Work Program, and the release of a Program Announcement for Natural Gas Infrastructure as part of their FYs 2016-18 Work Program. In addition, the contract for the MSRC's Technical Advisor expires September 30, 2017. To ensure continuation of these services, as part of the FYs 2016-18 Work Program, the MSRC approved the release of an RFP to solicit Technical Advisor services. At this time the MSRC seeks Board approval of the contract award and modification and to release the solicitations.

**COMMITTEE:** Mobile Source Air Pollution Reduction Review, May 18, 2017,  
Recommended for Approval

**RECOMMENDED ACTIONS:**

1. Approve contract award to Orange County Transportation Authority in an amount not to exceed \$834,222 to provide special bus service to the Orange County Fair in 2017 and 2018 under the Major Event Center Transportation Program, as part of approval of the FYs 2016-18 Work Program, as described in this letter;
2. Approve modified contract with Riverside County Transportation Authority under the Signal Synchronization Partnership Program, expanding the scope of the project area at no additional cost to MSRC, as part of approval of the FYs 2012-14 Work Program, as described in this letter;
3. Issue Program Announcement for the Natural Gas Infrastructure Program, with a targeted funding level of \$4,000,000, as part of approval of the FYs 2016-18 Work Program, as described in this letter and in the attached;
4. Issue RFP for Technical Advisor Services for a 27-month period beginning October 1, 2017, including a 24-month option term to extend, as part of approval of the FYs 2016-18 Work Program, as described in this letter and in the attached;

5. Authorize MSRC the authority to adjust contract awards up to five percent, as necessary and previously granted in prior work programs; and
6. Authorize the Chairman of the Board to execute new and modified contracts under FYs 2012-14 and FYs 2016-18 Work Programs, as described above and in this letter.

Michele Martinez,  
Acting Chair, MSRC

MM:FM:CR

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### **Background**

In September 1990 Assembly Bill 2766 was signed into law (Health & Safety Code Sections 44220-44247) authorizing the imposition of an annual \$4 motor vehicle registration fee to fund the implementation of programs exclusively to reduce air pollution from motor vehicles. AB 2766 provides that 30 percent of the annual \$4 vehicle registration fee subvented to the SCAQMD be placed into an account to be allocated pursuant to a work program developed and adopted by the MSRC and approved by the Board.

In October 2016, the MSRC selected initial categories for the FYs 2016-18 Work Program. At its May 18, 2017 meeting, the MSRC considered a recommended contract modification under the Signal Synchronization Partnership Program and a recommended award under the Major Event Center Transportation Program. The MSRC also considered the issuance of solicitations for the Natural Gas Infrastructure Program and Technical Advisor Services. Details are provided below in the Proposals section.

### **Outreach**

In accordance with SCAQMD's Procurement Policy and Procedure, public notices advertising the Natural Gas Infrastructure Program Announcement and Technical Advisor Services RFP will be published in the Los Angeles Times, the Orange County Register, the San Bernardino Sun, and Riverside County Press Enterprise newspapers to leverage the most cost-effective method of outreach to the South Coast Basin. In addition, the solicitations will be advertised in the Desert Sun newspaper for expanded outreach in the Coachella Valley. Public notices advertising the Major Event Center Transportation Program were likewise published in the Los Angeles Times, the Orange County Register, the San Bernardino Sun, Riverside County Press Enterprise, and Desert Sun newspapers.

Additionally, potential bidders may be and past bidders may have been notified utilizing SCAQMD's own electronic listing of certified minority vendors. Notice of the solicitations will be and notice of past solicitations was e-mailed to the Black and Latino Legislative Caucuses and various minority chambers of commerce and business

associations, and placed on the Internet at SCAQMD's Website (<http://www.aqmd.gov>). Further, the solicitations will be and past solicitations were posted on the MSRC's website at <http://www.cleantransportationfunding.org> and electronic notifications will be and past electronic notifications were sent to those subscribing to this website's notification service.

### **Proposals**

At its May 18, 2017 meeting, the MSRC considered recommendations from its MSRC-TAC and approved the following:

#### **FYs 2016-18 Major Event Center Transportation Program (PA2017-05)**

As part of its FYs 2016-18 Work Program, the MSRC allocated \$5,000,000 for event center transportation programs and released Program Announcement #PA2017-05. The Program Announcement solicits applications from qualifying major event centers and/or transportation providers to provide transportation service for venues not currently served by sufficient transportation service. To date, the MSRC has awarded \$503,272 to one project. The MSRC considered recommendations concerning an additional application submitted by Orange County Transportation Authority (OCTA). OCTA requested the MSRC to consider an award of \$834,222 to provide special bus service to the Orange County Fair in 2017 and 2018. Service would be provided on Saturdays and Sundays for the five July and August weekends of each Fair season, beginning at 10:00 a.m. and continuing hourly until 1:00 a.m., and would travel between nine existing transit facilities and the fairgrounds in Costa Mesa to maximize the potential for riders to complete the greater portion of their trip via transit. The service will utilize model year 2008 CNG buses initially, but begin phasing in buses repowered with the Cummins ISL G near-zero engine during the 2017 Fair season. It is intended that the 2018 service would be implemented using exclusively near-zero engine equipped buses. OCTA would contribute \$1,061,598 in co-funding. The MSRC approved a contract award to OCTA in an amount not to exceed \$834,222 as part of the FYs 2016-18 Work Program.

#### **FYs 2012-14 Signal Synchronization Partnership Program**

In July 2014, the MSRC approved an award to Riverside County Transportation Commission (RCTC) in an amount not to exceed \$310,375 to implement signal coordination and related projects along the Highway 111 corridor within the Coachella Valley portion of Riverside County; this award was combined with earlier awards to RCTC under one contract. The Coachella Valley Association of Governments' evaluation committee subsequently made the recommendation that signal synchronization projects should be completed regionally, rather than "city to city" or even one major roadway at a time, to ensure that the project areas are interconnected. RCTC proposed to expand the scope to cover nine cities as well as unincorporated areas. The project would continue to include signal upgrades, communication systems, hardware and software improvements, and a Traffic Management Center. Total project cost is now estimated at \$10,800,000, and the MSRC contribution would remain constant at \$310,375. The MSRC considered and approved RCTC's requested contract modification.

#### FYs 2016-18 Natural Gas Infrastructure Program

The MSRC approved release of Program Announcement #PA2017-07 under the FYs 2016-18 Work Program. The Program Announcement, with a targeted funding level of \$4.0 million, provides funds for new and expanded natural gas stations, as well as for the upgrade of existing vehicle maintenance facilities. Stations will be eligible for up to 50 percent of station capital equipment, site construction, signage, and reasonable project management costs, not to exceed the specified maximum award amounts. The maximum MSRC funding per project varies from \$100,000 to \$275,000 depending upon whether the applicant is a public or private entity, accessibility level of the proposed project, and the number of fuels offered. Additionally, projects may be eligible for a \$100,000 bonus if they commit to use at least 50% renewable natural gas for a minimum of five years. Lastly, the program offers funding for training technicians in the maintenance of natural gas vehicles and equipment, with a maximum per-entity award of \$15,000 and an overall cap of \$150,000. Proposals meeting requirements will be funded on a first-come, first-served basis. The RFP includes an open application period commencing with its release on June 2, 2017, and closing June 29, 2018, and projects will be brought to the MSRC for consideration of awards throughout the application period.

#### MSRC Technical Advisor Services

The MSRC retains a Technical Advisor for programmatic and technical assistance. At their May 18, 2017 meeting, the MSRC approved release of an RFP #P2017-15 to solicit Technical Advisor services for an initial 27-month period beginning October 1, 2017, including a 24-month option term to extend, as part of the FYs 2016-18 Work Program. The purpose of the Technical Advisor is to provide independent, objective assistance and advice to the MSRC and the MSRC's Technical Advisory Committee. The RFP establishes the following scoring criteria: Technical Qualifications/Experience; Technical Approach; Proposed Cost; Past Performance; and DVBE/Local Business/Small Business status. So long as expertise and qualifications meet the requirements, individually or collectively, proposals may be submitted by: 1) a single independent contractor, 2) two or more independent contractors submitting a joint proposal; or 3) a consulting firm designating a team of key personnel. Proposals are due by July 13, 2017.

At this time, the MSRC requests the SCAQMD Board to approve the contract award and modification and to approve release of the Program Announcement and RFP as part of approval of the FYs 2012-14 and FYs 2016-18 AB 2766 Discretionary Fund Work Programs as outlined above. The MSRC also requests the Board to authorize the SCAQMD Chairman of the Board the authority to execute all agreements described in this letter. The MSRC further requests authority to adjust the funds allocated to each project specified in this Board letter by up to five percent of the project's recommended funding. The Board has granted this authority to the MSRC for all past Work Programs.

**Resource Impacts**

The SCAQMD acts as fiscal administrator for the AB 2766 Discretionary Fund Program (Health & Safety Code Section 44243). Money received for this program is recorded in a special revenue fund (Fund 23) and the contracts specified herein, as well as any contracts awarded in response to the solicitation, will be drawn from this fund.

**Attachment**

Program Announcement #PA2017-07 – Natural Gas Infrastructure Program

RFP #P2017-15 – Technical Advisor Services for the MSRC



## **REQUEST FOR PROPOSALS P2017-15**

**For Technical Advisor Services  
for the Mobile Source Air  
Pollution Reduction Review Committee  
(MSRC)**

**June 2, 2017**

The Mobile Source Air Pollution Reduction Review Committee (MSRC) requests proposals for technical advisor services pursuant to the terms and conditions outlined in this Request for Proposals (RFP). In the preparation of this RFP, the words "Proposer," "Contractor," "Consultant," "Bidder," and "Independent Contractor" are used interchangeably.

## **PURPOSE**

The purpose of this RFP is to solicit proposals from consultants with strong technical expertise to provide services as the Technical Advisor to the MSRC. So long as expertise and qualifications meet the requirements, individually or collectively, proposals may be submitted by: 1) a single independent contractor, 2) two or more independent contractors submitting a joint proposal; or 3) a consulting firm designating a team of key personnel. The purpose of the Technical Advisor is to provide independent, objective assistance and advice to the MSRC and the MSRC's Technical Advisory Committee (MSRC-TAC) on technical issues related to the AB 2766 Discretionary Fund Program and projects funded under the MSRC's Work Program. The successful Bidder must enter into a Time & Materials (T&M) type contract with the South Coast Air Quality Management District (SCAQMD) in order to receive reimbursement for T&M incurred under this contract. This RFP is also being used to supplement existing MSRC-TAC and MSRC staff resources with specialized outside expertise.

The MSRC requires an independent contractor for Technical Advisor services to plan, implement and monitor its Work Program pursuant to Health & Safety Code Sections 44220-44247. Proposer shall have general business office equipment at their primary office location. However, should Proposer desire, the MSRC shall also make available to the Contractor as a convenience, the following at no additional cost to the Contractor and for the purposes of fulfilling the duties under this contract. These items are all located at SCAQMD Headquarters in Diamond Bar, California:

1. computer, printer, scanner and digital camera
2. telephone and copier machine
3. miscellaneous general office supplies
4. on-site print shop services
5. on-site mail services (postage & handling)
6. on-site office space and office furnishings including access and use of conference center facilities
7. on-site parking

The period of performance will be for a base 27-month term beginning October 1, 2017 and ending December 31, 2019. The contract will contain an option provision to renew the contract for an additional 24-month term based upon the MSRC's determination of satisfactory performance by the Technical Advisor. Supplemental funding for each additional term of the contract will require review and approval by the MSRC and subsequent SCAQMD approval as part of the MSRC Work Program and is contingent upon this review and approval.

INDEX - The following Sections are contained in this RFP:

Section I	Introduction/Background Information
Section II	Contact Persons
Section III	Schedule of Events
Section IV	Statement of Work/Schedule of Deliverables
Section V	Required Qualifications
Section VI	Proposal Format and Submittal Requirements
Section VII	Proposal Submission



Section VIII	Audit Procedures
Section IX	Proposal Evaluation Process
Section X	Contractor Selection Criteria
Section XI	DVBE/Local Business/Small Business Status
Section XII	Draft Standard Contract
	Attachment A - Certifications and Representations

## **SECTION I: INTRODUCTION/BACKGROUND INFORMATION**

In September 1990, Assembly Bill 2766 was signed into law (Health & Safety Code Sections 44220-44247). This legislation authorizes the imposition of an additional motor vehicle registration fee of \$2 in 1991 and \$4 in 1992 and subsequent years to fund the implementation of programs to reduce air pollution from mobile sources pursuant to air quality management plans and provisions of the California Clean Air Act. The provisions of the bill stated that the fee would be imposed by non-attainment air pollution control districts upon the approval of the fee and a corresponding program to reduce mobile source air pollution by the Governing Board of the SCAQMD. In November of 1990, the SCAQMD Governing Board approved the \$2 fee to be levied beginning April 1, 1991, and the \$4 fee to be levied on April 1, 1992, and thereafter.

AB 2766 also provided that the monies collected by the Department of Motor Vehicles would be distributed to the SCAQMD for distribution in the following manner: thirty cents of every dollar shall be used by the SCAQMD for programs to reduce air pollution from motor vehicles and to carry out planning, monitoring, enforcement and technical studies which are authorized by, or necessary to implement, the California Clean Air Act; forty cents of every dollar shall be distributed by the SCAQMD to cities and counties located in the South Coast District to be used to reduce mobile source air pollution; and thirty cents of every dollar shall be deposited by the SCAQMD in a discretionary account (the AB 2766 Discretionary Fund) to be used to implement or monitor programs to reduce motor vehicle air pollution.

To determine which projects should be funded by the AB 2766 Discretionary Fund, AB 2766 called for the creation of the MSRC (Health & Safety Code Section 44244) to: 1) develop a work program for evaluating programs; 2) evaluate said programs; and 3) make a final recommendation to the SCAQMD Governing Board as to which programs and/or projects should be funded. The legislation also called for the formation of the MSRC-TAC to assist and advise the MSRC.

Technical Advisor services will be funded through the AB 2766 Discretionary Fund and will provide technical assistance in evaluation of proposed AB 2766 Discretionary Fund projects, monitor the technical performance of AB 2766 Discretionary Fund contractors, review all final reports on AB 2766 Discretionary Fund projects, keep the MSRC and MSRC-TAC apprised on the latest technologies and scientific developments which may affect AB 2766 Discretionary Fund projects, and prepare the annual California Air Resources Board (ARB) required report assessing the emissions benefits and cost effectiveness of AB 2766 Discretionary Fund projects.

The MSRC has not established a budget for Technical Advisor services for the subject period. As a point of reference, however, the MSRC's last award for Technical Advisor provided \$294,700 for an initial two-year term and \$299,600 for the two-year option term.

For more information on the MSRC and the AB 2766 Discretionary Fund, please visit their website at [www.CleanTransportationFunding.org](http://www.CleanTransportationFunding.org). The SCAQMD acts as the contracting and fiduciary agency for the MSRC. For more information on the SCAQMD, the air pollution control agency for all of Orange County and the urban portions of Los Angeles, Riverside and San Bernardino counties, which is the smoggiest region in the U.S., please visit their website at [www.aqmd.gov](http://www.aqmd.gov).

**SECTION II:      CONTACT PERSONS**

Questions regarding the content or intent of this RFP or on procedural matters should be addressed to:

**Mr. Dean Hughbanks, Procurement Manager**  
SCAQMD  
21865 Copley Drive  
Diamond Bar, CA 91765-4178  
(909) 396-2808

General questions regarding this RFP, including the scope of work, please contact:

**Ms. Gretchen Hardison**  
MSRC-TAC Chair  
City of Los Angeles/LADWP  
Phone: (213) 367-2490  
E-mail: [gretchen.hardison@ladwp.com](mailto:gretchen.hardison@ladwp.com)

Technical questions regarding this RFP, please contact:

**Mr. Fred Minassian**  
SCAQMD  
21865 Copley Drive  
Diamond Bar, CA 91765  
Phone: (909) 396-2641  
Email: [fminassian@aqmd.gov](mailto:fminassian@aqmd.gov)

**SECTION III:      SCHEDULE OF EVENTS**

June 2, 2017	RFP Released
July 13, 2017	All Proposals Due by 2:00 p.m.
July 14-21	Proposal Evaluation Period
July 21, 2017 by Noon	Notification of Interview on or around July 27
On or around July 27, 2017	Interviews of Top-Ranked Bidders 9 am to 5 pm (at discretion of Subcommittee)
August 3, 2017	MSRC-TAC Mtg/Recommendations
August 17, 2017	MSRC Mtg/Proposal Review & Approval
September 1, 2017	Governing Board Approval of Contract

It is up to the discretion of the MSRC-TAC Technical Advisor Evaluation Subcommittee whether or not interviews will be conducted. Proposers which meet the minimum RFP criteria shall be notified by Noon on July 21, 2017, as to whether or not an interview will be conducted on or around July 27, 2017, and the time. If interviews are held, interviews are a **MANDATORY** requirement of this RFP. If the Bidder is unable to attend an interview either by phone or in person at the MSRC offices, then the Bidder will be disqualified from this RFP process. Primary team members or key personnel (who would be performing the deliverables under the contract) shall be part of the interview process.

#### **SECTION IV: STATEMENT OF WORK/SCHEDULE OF DELIVERABLES**

The following Statement of Work becomes an integral part of the Contract. The Contractor shall perform the following tasks in support of the AB 2766 Discretionary Fund Program:

##### **Task 1 – RFP and Contract Preparation Assistance**

###### **1.1 Preparation of AB 2766 Discretionary Fund Solicitations**

Contractor will provide support in the preparation of Requests for Proposals (RFPs) and/or Program Announcements, as appropriate, for the Work Program categories as established and approved by the MSRC. This support shall include, but not be limited to, preparation of category RFPs including the statements of work, verification of the accuracy of technical information to be provided in the RFPs, and drafting appropriate evaluation criteria. Throughout the RFP and Contract preparation period, Proposer shall communicate significant questions/concerns to the Evaluation Committee, the MSRC-TAC and the MSRC as necessary, including, but not limited to verbal notifications and/or supplemental bulletins.

###### **1.2 Bidders' Conference(s) and/or Proposer Assistance**

Based upon RFPs approved by the MSRC, should Bidders' Conference(s) be required, Contractor will prepare and present technical information relative to the RFPs at the Bidders' Conference(s), any technical workshops, or requests made through individuals. Types of information which may be prepared and presented by CONTRACTOR may include, but are not necessarily limited to:

- a. brief overview on the background of the Discretionary Fund program;
- b. description of the RFP categories for which proposals are sought;
- c. discussion of the RFP requirements;
- d. proposal preparation instructions;
- e. examples of statements of works;
- f. proposal preparation checklist;
- g. emissions calculation methodologies.

Throughout the proposal preparation period as outlined in each RFP, Contractor will be available to respond to technical questions raised at all Bidders' Conferences, workshops, or via individual requests.

### 1.3 Proposal Evaluation Support

Contractor will provide technical assistance to the MSRC-TAC evaluation subcommittees including but not limited to assessment of proposals' overall technical merit, assessment of proposed projects' technical feasibility and probability of achieving proposed objectives, and verification of proposed emissions benefit calculations. Contractor may be asked to provide comments in written form or by means of an oral presentation to the evaluation subcommittees. Contractor shall advise the evaluation subcommittees on the effectiveness of past projects in the areas proposed and inform the evaluation subcommittees regarding proposed projects which duplicate work being funded by other sources and any relevant regulatory requirements that may apply to the proposed projects. Contractor shall provide independent, objective technical advice to the evaluation subcommittees, but shall not score proposals. Contractor shall compile the results of the Subcommittees evaluation and scoring. Should the MSRC require within a specific RFP, evaluation criteria based on emission and quantitative criteria only, MSRC may direct Contractor to evaluate proposals submitted within that category, and present final results to Evaluation Subcommittee. Where appropriate, Contractor shall provide information from documented sources in relevant technical fields to support his/her technical conclusions.

### 1.4 Review and Prepare Contract Work Statements

Upon award by the MSRC and during the contract preparation period, Contractor will review statements of work for technical adequacy on an as-needed basis. Contractor shall work directly with MSRC staff and/or AB 2766 awardees to revise inadequate statements of work and resolve technical issues.

### 1.5 Prepare and Present Debriefs for Proposals Not Recommended for Funding

Upon direction by the MSRC, or upon bidder's request, Contractor may be required to prepare and present debriefs to unsuccessful AB 2766 bidders. These will be performed one-on-one with the unsuccessful bidders or via a written report. This activity will be coordinated with the appropriate MSRC-TAC evaluation subcommittee chair and MSRC staff.

## **Task 2 – Work Program Support**

### 2.1 Progress Report Technical Evaluation

On an as-needed basis, Contractor will review and evaluate AB 2766 Discretionary Fund progress reports relative to technical issues and concerns. Contractor will recommend a course of action to resolve technical issues identified during progress report review and participate in face-to-face meetings with contractors as required. Contractor will notify the MSRC-TAC and the MSRC of any technical problems that should arise from Contractor's review of Progress Reports.

### 2.2 Final Report Evaluation

Contractor will review and evaluate all AB 2766 Discretionary Fund Final Reports. Contractor will quantify emissions benefits and cost effectiveness of each final report using methodologies approved by the ARB. The final report will also be summarized in a template format which is incorporated into the MSRC website. Final reports shall be submitted to the MSRC-TAC and MSRC on a monthly basis, for final review/approval.

### 2.3 Invoice Technical Evaluation

On an as-needed basis, Contractor will review and evaluate AB 2766 Discretionary Fund work program invoices relative to the appropriateness of charges in fulfillment of statement of work technical requirements. Contractor will recommend a course of action to resolve concerns identified during invoice review. If required, Contractor shall notify MSRC-TAC and MSRC of any technical concerns/issues that cannot be remedied.

### 2.4 Technical Review Meetings and Visits to Contractor Facilities

As required, Contractor will conduct technical review meetings with AB 2766 contractors and will visit contractor facilities as required to physically verify reported progress on AB 2766 projects.

### 2.5 Work Program Development Support

Contractor will provide technical support to the MSRC during its review of past work programs, as well as the development of its future work program(s). This process may include one to three separate meetings/workshops, where the Proposer would be responsible for:

- a. coordinating speakers (ARB, SCAQMD, to name a few) on their respective programs and areas of focus,
- b. preparing presentation materials (including power points and spreadsheets),
- c. summarizing past MSRC-funded projects and results, including emissions and cost-effectiveness assessments,
- d. identifying current and upcoming state of the art technologies, relevant to the MSRC funded programs,
- e. identifying mobile source emissions reductions programs and initiatives being funded by other sources,
- f. identifying local, state and federal regulations/rules impacting possible MSRC-funded programs, including, but not limited to relevant AQMP strategies and control measures ,
- g. recommendations on possible work program categories, as well as suggestions on how to improve the technical quality of AB 2766 projects,
- h. steps and/or barriers to implementing possible work program categories, and
- i. summarizing resulting MSRC priorities from these various meetings/workshops.

Proposer will work closely with MSRC staff, MSRC-TAC Chair, MSRC-TAC Subcommittee Chairs and the MSRC Chair in the coordination and presentation of materials at these meetings/workshops, as well as be responsible for summarizing results of workshops, and presenting results at future meetings.

### 2.6 Areas of Expertise/Support Required for Annual Work Programs

Contractor will provide technical support, as necessary, for the MSRC's annual work program to include, but not be limited to, the following technical areas:

- a. Alternative fuel infrastructure, implementation and operations
- b. Clean-fuel technologies, for light, medium and heavy duty vehicles (including both on and off road vehicles), including engine technologies and retrofit technologies for a variety of alternative fuels
- c. Vehicle emission control and low carbon fuel technologies
- d. Local, State and Federal air quality and related climate change regulations

- e. Technologies in the early deployment stage, such as fuel cells, hydrogen technology, advanced batteries, to name a few
- f. Transportation control measure strategies, such as ridesharing, non-motorized transportation, to name a few
- g. Research and development issues, impacting the above technologies
- h. Requirements of the Health & Safety Codes, as well as MSRC policies and procedures
- i. ARB certification and verification processes
- j. Other areas as deemed appropriate by the MSRC

## **2.7 Vehicle Incentive Program Support**

Upon direction by the MSRC, Contractor will provide technical and operational support to any of MSRC's vehicle incentive programs including, but not limited to, developing manufacturer qualifications, reviewing and evaluating vehicle manufacturer's qualification packets, program implementation, and monitoring.

## **Task 3 – General/Other Support**

### **3.1 Annual ARB Report on AB 2766 Projects**

Contractor will prepare the annual ARB report on the assessment of emissions benefits and cost effectiveness for AB 2766 Discretionary Fund projects using the ARB provided electronic format. The AB 2766 Discretionary Fund data will be integrated with SCAQMD generated data for submission to the ARB.

### **3.2 Professional Symposia and Technical Conferences**

At the direction of the MSRC, Contractor will attend professional symposia and technical conferences related to AB 2766 Discretionary Fund work program areas. Contractor may, from time to time, be asked to prepare and/or present technical papers on behalf of the MSRC, or to provide technical information/support to MSRC-TAC and/or MSRC members at such events.

### **3.3 Meeting Attendance**

Contractor will attend the monthly MSRC-TAC and MSRC meetings (typically scheduled monthly on the first and third Thursdays, respectively), bidder's conferences. Contractor attendance may be required at MSRC-TAC evaluation subcommittees, as well as other meetings as required. Most meetings are held at the SCAQMD offices. Contractor will be required to prepare for all meetings, including materials/handouts, as well as consulting with MSRC-TAC and/or Subcommittee Chairs and MSRC staff as needed. Contractor may also be required to attend monthly SCAQMD Governing Board meetings (typically first Friday of the month) when MSRC items are on the Board agenda, and shall respond to questions by Governing Board members, as needed.

### **3.4 Special Projects/Other Related Duties**

Contractor will support any special projects and will provide assistance to other duties, as requested/directed by the MSRC. It is conceivable the MSRC may direct special projects on a task-order basis and/or may direct or allow the Technical Advisor to subcontract a special task in which case a not-

to-exceed amount for the task order or subcontract work will be identified and included in the contract at the time of execution or through a future contract amendment.

### 3.5 Assistance to MSRC Outreach Coordinator

Contractor will assist the MSRC Outreach Coordinator in the review of documents and materials which contain technical material, providing information on emissions reductions of MSRC programs. Contractor shall review any other public outreach materials generated by the MSRC, as well as provide input into technical sections of the MSRC website.

## **Task 4 - Contract Deliverables**

### 4.1 Final Report Summaries

No later than the last Thursday of every month, Contractor will submit summaries of all final reports received, evaluated and finalized for inclusion in the MSRC-TAC agenda.

### 4.2 Materials

As appropriate, Contractor will provide copies of presentation material, hand-out materials, power point presentations and other materials, as described in Tasks 1, 2 and 3 above, to the appropriate MSRC Chair, MSRC-TAC Chair, or Subcommittee Chair. Materials for the MSRC-TAC Agenda packets are due by the last Thursday of each month, and materials for the MSRC Agenda packet are due by no later than the second Thursday of each month.

### 4.3 ARB Final Report - as defined in Task 3.1 above.

## **SECTION V: MINIMUM QUALIFICATIONS**

The successful bidder must meet the following minimum qualifications and demonstrate an understanding of the MSRC's mission. Individuals can team to submit a joint proposal should they have complementary expertise and qualifications that collectively meet the requirements. Key team members to perform Technical Advisor services to the MSRC must possess minimum years of experience in Items 2 and 3 below.

1. B.A. or B.S. in engineering, environmental science, urban planning, or other related disciplines.
2. Five years of experience in managing technical projects
3. Five years of experience working with public agencies and elected officials.
4. Knowledge of local, state and federal air quality laws and regulations.
5. Familiarity with SCAQMD programs and regulations for mobile sources, as well as EPA and ARB approved methodologies for calculating emissions benefits and cost effectiveness.
6. Understanding of technologies and scientific developments related to reduction of air pollution from mobile sources, to include, but not be limited to, alternative fuel vehicles and infrastructure, alternative fueling infrastructure, fuel cell technology and transportation control measures.
7. The ability to quickly respond, on short notice, to requests for technical assistance.
8. Established relationships with equipment manufacturers and industry and professional associations.

In addition to the minimum qualifications above, the most competitively qualified candidates will possess thorough knowledge of the strategies in the SCAQMD's Air Quality Management Plan, as well as thorough knowledge of SCAQMD incentive programs.

Include detailed description of experience, education and training of Proposer and key staff. Also indicate proof of qualification requirements such as licenses, memberships and/or endorsements. Proposer must submit a resume or similar statement of qualifications including, but not limited to, educational degrees and area of study, summary of relevant professional experience, list of technical publications, organizational affiliations, and other information which demonstrates Proposer's knowledge of laws and regulations pertaining to air quality and current and emerging technologies related to reduction of mobile source air pollution, and experience interacting with State agencies.

## **SECTION VI: PROPOSAL FORMAT AND SUBMITTAL REQUIREMENTS**

Submitted proposals must follow the format outlined below and all requested information must be supplied. Failure to submit proposals in the required format will result in elimination from proposal evaluation.

Format - All proposals must be submitted unbound on white, 8 ½" x 11" paper. The maximum length of proposals accepted will be fifteen (15) sheets of paper. All pages and appendices must be numbered. Technical appendices of no more than twenty-five (25) sheets of paper, including information on bidder's past projects and experience, may be attached. Paper may be double-sided, i.e. printed on both sides.

In addition to the paper Proposal, Proposers must also submit an electronic copy of their Proposal in either PDF or Microsoft Word format. This shall be provided via CD-ROM. The CD-ROM should be included with the paper original as described below. Over-sized attachments are not required to be included in the electronic copy if inclusion would be problematic. In the case of any discrepancy between the electronic copy and the paper original, the paper original shall prevail.

Cover Letter - Transmittal of the proposal must specify the subject of the proposal, the MSRC RFP number, and Bidder's name, address, telephone number and e-mail address. The letter shall specify contact person(s) for technical and contractual matters, and be signed by the person(s) authorized to contractually bind the bidding entity. For joint proposals (from more than one entity and/or consultant) the bidder must include a statement confirming authorization to act on behalf of other co-bidders. The bidder must include a letter of support or memorandum of understanding, including project contact name, telephone and fax number, from all proposing entities. Proposer will acknowledge that the interview date is on or around July 27, 2017 and that Proposer, including key personnel who would be performing contract deliverables, intends to be available for that date. Proposal should also acknowledge that proposal shall constitute a firm offer and may not be withdrawn for a period of ninety (90) days following the last day to accept proposals, and that they have checked the website for addenda and/or supplementary information to the RFP; failure to do so may disqualify the bidder.

Table of Contents - Clearly identify material contained in the proposal by section and page number.



SECTION 1 - Technical Approach for Accomplishing the Statement of Work: List, and concisely describe approach to the tasks and subtasks, and milestones if any and if appropriate. The tasks and subtask descriptions shall be sufficiently specific for inclusion into a binding contractual document.

SECTION 2 - Program Schedule: Since the majority of the work performed is per the direction of the MSRC, or is based on milestones as established by the MSRC or another agency such as the ARB, a program schedule is not required. However, in this section, please identify if there may be any conflicts in completing all the tasks, or any issues related to task delivery.

SECTION 3 - Project Organization: This section should describe the labor organization required to perform the proposed services. This section should include assigned personnel and any subcontractors. Resumes of assigned personnel and anticipated subcontractors should be included in the proposal. As part of your proposal, certify that you are a legal entity capable of entering into contracts within the State of California.

SECTION 4 - Conflict of Interest – Address possible conflicts of interest with other clients affected by actions performed by the firm on behalf of the MSRC. Provide a list of current clients. Although the Proposer will not be automatically disqualified by reason of work performed for such firms, MSRC reserves the right to consider the nature and extent of such work in evaluating the proposal and in issuing future task orders.

Please note that the Technical Advisor will be subject to the requirements and restrictions of the SCAQMD Conflicts of Interest Code, as well as state law and regulations governing economic conflicts of interest. The following language will be included in the Technical Advisor's contract:

As a condition of the contract, as the Technical Advisor of the MSRC, CONTRACTOR agrees to avoid any actual or perceived conflicts of interest between CONTRACTOR's economic interests and its duties under the contract. To ensure that no conflicts exist with CONTRACTOR's other clients, CONTRACTOR agrees to immediately notify SCAQMD of any potential conflicts of interest prior to entering into or renewing a contract with any person, company, organization or governmental entity that CONTRACTOR reasonably foresees will apply to receive funding from the MSRC during the term of this contract

SECTION 5 - Cost Schedule: This schedule should include a full and complete cost element breakdown by Statement of Work Task. The cost schedule must include:

- a. Total Proposed Cost - include total proposed cost for the base 27-month term as well as the 24-month option term.
- b. Labor - identify each professional category of direct project support, the number of hours by Task, and the fully burdened rate per hour. Provide an explanation for the overall fully burdened rate per hour per professional category, and how that rate was obtained (including a breakout and explanation for overhead, fringe, other general and administrative expenses, and profit). If subcontractors are not identified, provide an estimate of their rates of compensation and number of hours or days the subcontractor's services will be utilized. The Bidder is required to certify as part of their proposal submission that the prime contractor and subcontractor rates contained in the proposal are no higher than the rates offered to the prime or subcontractor's most favored customer.

- c. Travel and Related Expenses - Please confirm that the technical expert can meet the District's practice in charging travel and related expenses stated below.
1. Will not pay for interest or fees accrued on credit cards, when using credit cards for payments.
  2. Will pay a maximum of \$150 per day for lodging, unless prior written approval is received from the SCAQMD.
  3. Will pay class C or economy rates for automobile rental, unless prior written approval is received from the SCAQMD.
  4. Will only pay coach rate for airfare.
  5. Will not pay profit or fee on charges for supplies, equipment, travel, and subcontractors.
  6. Will reimburse mileage at the current SCAQMD rate (currently \$0.535 per mile).
  7. Will reimburse for meals, based on the current SCAQMD rate (currently a maximum of \$50.00/day for meals).
  8. Will reimburse costs on an as-incurred basis only.
  9. Charges for supplies, equipment, and subcontractors will be paid at cost. No profit will be paid on these costs.
- d. Supplies and Equipment - Capital costs are not eligible for funding. Provide an itemized list of supplies and equipment to be used and/or purchased and reimbursed for under this contract (include item brand, cost and purpose).
- e. Subcontractor Costs - Identify subcontractors by name, the basis for the subcontractors selection and describe in detail the work the subcontractors will be hired to perform, list their cost per hour or per day, and the number of hours or days their services will be used.
- f. Miscellaneous Costs - if any

SECTION 6 - Past Performance: This section must include the following information on at least three contracts for similar or related projects which the Proposer has performed in the past five years:

- a. a brief description of the project;
- b. the contract value at inception and expiration (any cost growth should be explained);
- c. the period of contract performance;
- d. the contract type, such as fixed price, T&M or cost reimbursement; and
- e. the name and telephone number of the contracting agency's representative.

SECTION 7 - All certifications and representations (see Attachment A to this RFP) must also be provided.

## **SECTION VII: PROPOSAL SUBMISSION**

All proposals must be submitted according to specifications set forth in the section above. Failure to adhere to these specifications may be cause for rejection of proposal.

Signature - All proposals should be signed by an authorized representative of the Proposer.

Due Date - The Proposer shall submit one (1) original Proposal marked as the "original" and three (3) complete paper copies, as well as one electronic copy on CD-ROM, in a sealed envelope, plainly marked in the upper left-hand corner with the name and address of the Proposer and the words "Technical Advisor Services - P2017-15." All proposals are due no later than 2:00 p.m., July 13, 2017, and should be directed to:

Procurement Unit  
South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765

*Please note that the Proposal is only deemed "received" when an original and three (3) complete paper copies are submitted in accordance with the above instructions - submittal of an electronic Proposal only does not constitute receipt by the SCAQMD.* Late bids/proposals and proposals submitted via email and/or by FAX will not be accepted. **Please note that any proposal received at 2:01 p.m. or later on July 13, 2017, will not be evaluated and will not be eligible for MSRC funding.** NO exceptions for any reason will be granted. Any correction or re-submission done by the bidder will not extend the submittal due date.

Addenda - MSRC may modify the RFP and/or issue supplementary information or guidelines relating to the RFP during the proposal preparation period, from June 2, 2017 through July 13, 2017, at 2:00 p.m. Check back on the MSRC's website periodically throughout this open bid period for supplementary information or guidelines.

Disposition of Proposals - MSRC reserves the right to reject any or all proposals. All responses become the property of MSRC. One copy of the proposal shall be retained for SCAQMD files. Additional copies and materials will be returned only if requested and at the Proposer's expense.

Modification or Withdrawal - Once submitted, proposals cannot be altered without the prior written consent of SCAQMD. All proposals shall constitute firm offers and may not be withdrawn for a period of ninety (90) days following the last day to accept proposals; this shall be noted in the Cover Letter required under Section XI.

## **SECTION VIII:     AUDIT PROCEDURES**

The AB 2766 legislation requires that the SCAQMD, at least once every two years, undertake an audit of programs or projects funded. The audit is to be conducted by an independent auditor selected by the SCAQMD. Any bidder who receives monies from the AB 2766 Discretionary Fund may, at least once every two years, be subject to an audit of each program or project funded.

Under the completion of an audit, the SCAQMD will make the audit available to the public and to the bidder upon request and will review the audit to determine if the monies were used for the reduction of air pollution from motor vehicles pursuant to the California Clean Air Act of 1988. If the SCAQMD determines that the monies were expended in a manner contrary to law, the SCAQMD will notify the contractor of the determination and, within 45 days, may hold a public hearing at which the contractor may present information related to the expenditure of monies.

## **SECTION IX: PROPOSAL EVALUATION PROCESS**

An Evaluation Subcommittee of the MSRC-TAC will evaluate all proposals to determine responsiveness to the RFP. SCAQMD staff may provide administrative and technical assistance during the proposal evaluation process.

Proposals will be evaluated and points awarded based upon the criteria outlined in Section X. The evaluation criteria are included to provide the bidder additional guidance as to the particular components of the proposal that will be evaluated. The top-ranked bidders may be interviewed by an Evaluation Subcommittee of the MSRC-TAC on or around Thursday, July 27, 2017. Bidders will be notified by noon on Friday July 21, 2017, if they are invited to the interview process. If interviews are held, participation in the interview process on the date set aside is a MANDATORY requirement of this RFP. Primary team members or key personnel (who would be performing the deliverables under the contract) shall be part of the interview process.

At the completion of the evaluation process, the MSRC will consider and vote on the Subcommittee recommendation at its August 17, 2017 meeting. The MSRC's contract award is subject to approval by the SCAQMD Governing Board to execute a contract with the successful bidder. The resulting contract will include a key personnel clause.

**NOTE:** Pursuant to the Brown Act, public comments are allowed at MSRC and MSRC-TAC meetings during the "public comment" period and on any specific agenda item. All bidders have the opportunity to attend full committee meetings and are encouraged to do so.

## **SECTION X: CONTRACTOR SELECTION CRITERIA**

An Evaluation Subcommittee of the MSRC-TAC will identify the successful bidder as the one with the highest-scored proposal based upon the following evaluation criteria. The recommended selection will be forwarded to the MSRC-TAC and MSRC for their consideration. Final selection by the MSRC will be made on August 17, 2017, and submitted to the SCAQMD Governing Board for consideration and approval at its September 1, 2017 meeting.

The maximum score available is 100 points.

### **#1: Technical Qualifications/Experience**

**40 Points**

The Proposer will be evaluated based on their educational credentials, experience managing technical projects, experience working with public agencies/elected officials, knowledge of technologies and scientific developments related to reduction of mobile source air pollution, experience using ARB methodologies to calculate emissions benefits and knowledge of local, state and federal air quality laws/regulations.

### **#2: Technical Approach**

**20 Points**

The Proposer will be evaluated based on their understanding of the statement of work requirements as well as the outlined approach for interfacing with MSRC, MSRC-TAC, MSRC staff, other government agencies, industry groups, and members of the public. This interface includes an understanding/experience for resolving conflicts, method for establishing priorities and protocol for responding to requests for information.

**3#: Proposed Cost****20 Points**

Maximum points will be awarded to the Proposer offering the lowest fully burdened labor rates during the base term (two years) and the option (two-year term). Points awarded to other Proposers will be prorated based on the lowest proposed rate.

**#4: Past Performance****10 Points**

Quality of past performance on similar or related projects performed in the past five years based upon verification of the information provided in proposal.

**#5: DVBE/Local Business/Small Business Status****10 Points**

Certified as DVBE, local business and/or small business as described in Section XI of this RFP.

**Maximum Point Award****100 points****SECTION XI: DVBE/LOCAL BUSINESS/SMALL BUSINESS STATUS**

On May 27, 1999, the MSRC approved a policy regarding other evaluation factors for inclusion in MSRC procurements. MSRC procurements, where the services/product solicited are assistance to the MSRC in implementing its work program and where a portion or all of these services are not readily quantifiable, the MSRC shall only have the following "Other" Criteria in the evaluation component of the procurements which do not emphasize quantifiable emissions reductions:

It is the policy of the MSRC to encourage participation by disabled veteran business entities, local businesses and small business and in the bidding process. The MSRC shall provide five (5) points each for Proposers who meet the following criteria, with the maximum points available not-to-exceed ten (10) points. Points shall only be awarded should the Proposer, upon submission of its proposal, provide documents from a state or local agency certifying that it qualifies in the categories described below:

**#1 "Disabled Veteran"** as used herein is a United States military, a naval, or air service veteran with at least 10 percent service-connected disability. "Disabled Veteran Business Enterprise" as used herein means a sole proprietorship or partnership or corporation which is at least 51 percent owned by one or more disabled veterans and whose management and control of the daily business operations are by one or more disabled veterans.

**#2 "Local Business"** as used herein means a Proposer which can demonstrate that it has an on-going business within the SCAQMD at the time of the bid application and performs 90% of the work related to the contract with the SCAQMD.

**#3 "Small Business"** as used herein means a business that is:

- 1) independently owned and operated business, and
- 2) is not dominant in its field of operation and
- 3) together with affiliates is either a service, construction, or non-manufacturer with 100 or fewer employees, and average annual gross receipts of ten million dollars or less over the previous three years, or a manufacturer with 100 or fewer employees.

## **SECTION XII - DRAFT SAMPLE CONTRACT**

Bidders whose projects are selected for funding must enter into a Time & Materials (T&M) type contract with the SCAQMD as a condition of receiving funds. Contract preparation will begin immediately upon approval by the SCAQMD Governing Board.

A sample SCAQMD contract document may be downloaded from this page: <http://www.aqmd.gov/grants-bids>. Each bidder should review the sample contract for all possible exceptions to the boilerplate provisions. Any exceptions to the sample contract terms and conditions should be identified in the proposal. Please note that this is a sample only, and the MSRC may modify provisions.

## Attachment A: Certifications

Form <b>W-9</b> (Rev. December 2014) Department of the Treasury Internal Revenue Service	<b>Request for Taxpayer Identification Number and Certification</b>	<b>Give Form to the requester. Do not send to the IRS.</b>
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Print or type See Specific Instructions on page 2.	1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.	
	2 Business name/disregarded entity name, if different from above	
	3 Check appropriate box for federal tax classification; check only <b>one</b> of the following seven boxes: <input type="checkbox"/> Individual/sole proprietor or single-member LLC <input type="checkbox"/> C Corporation <input type="checkbox"/> S Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Trust/estate <input type="checkbox"/> Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ▶ _____ <b>Note.</b> For a single-member LLC that is disregarded, do not check LLC; check the appropriate box in the line above for the tax classification of the single-member owner. <input type="checkbox"/> Other (see instructions) ▶ _____	4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3): Exempt payee code (if any) _____ Exemption from FATCA reporting code (if any) _____ <i>(Applies to accounts maintained outside the U.S.)</i>
	5 Address (number, street, and apt. or suite no.)	Requester's name and address (optional)
	6 City, state, and ZIP code	
7 List account number(s) here (optional)		

<b>Part I Taxpayer Identification Number (TIN)</b>	
Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see <i>How to get a TIN</i> on page 3.	
<b>Social security number</b> <div style="border: 1px solid black; display: inline-block; width: 100px; height: 20px; margin-bottom: 2px;"></div> <div style="border: 1px solid black; display: inline-block; width: 10px; height: 20px; margin: 0 5px;"></div> <div style="border: 1px solid black; display: inline-block; width: 100px; height: 20px; margin-bottom: 2px;"></div> <div style="border: 1px solid black; display: inline-block; width: 10px; height: 20px; margin: 0 5px;"></div> <div style="border: 1px solid black; display: inline-block; width: 100px; height: 20px; margin-bottom: 2px;"></div>	<b>Employer identification number</b> <div style="border: 1px solid black; display: inline-block; width: 100px; height: 20px; margin-bottom: 2px;"></div> <div style="border: 1px solid black; display: inline-block; width: 10px; height: 20px; margin: 0 5px;"></div> <div style="border: 1px solid black; display: inline-block; width: 100px; height: 20px; margin-bottom: 2px;"></div> <div style="border: 1px solid black; display: inline-block; width: 10px; height: 20px; margin: 0 5px;"></div> <div style="border: 1px solid black; display: inline-block; width: 100px; height: 20px; margin-bottom: 2px;"></div>
<b>Note.</b> If the account is in more than one name, see the instructions for line 1 and the chart on page 4 for guidelines on whose number to enter.	

<b>Part II Certification</b>	
Under penalties of perjury, I certify that:	
1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and	
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and	
3. I am a U.S. citizen or other U.S. person (defined below); and	
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.	
<b>Certification instructions.</b> You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 3.	
<b>Sign Here</b>	Signature of U.S. person ▶ _____ <div style="text-align: right; margin-top: 10px;">Date ▶ _____</div>

**General Instructions**

Section references are to the Internal Revenue Code unless otherwise noted.

**Future developments.** Information about developments affecting Form W-9 (such as legislation enacted after we release it) is at [www.irs.gov/fw9](http://www.irs.gov/fw9).

**Purpose of Form**

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following:

- Form 1099-INT (interest earned or paid)
- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)

- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See *What is backup withholding?* on page 2.

By signing the filled-out form, you:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and
4. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See *What is FATCA reporting?* on page 2 for further information.



**Note.** If you are a U.S. person and a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

**Definition of a U.S. person.** For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien;
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States;
- An estate (other than a foreign estate); or
- A domestic trust (as defined in Regulations section 301.7701-7).

**Special rules for partnerships.** Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax under section 1446 on any foreign partners' share of effectively connected taxable income from such business. Further, in certain cases where a Form W-9 has not been received, the rules under section 1446 require a partnership to presume that a partner is a foreign person, and pay the section 1446 withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid section 1446 withholding on your share of partnership income.

In the cases below, the following person must give Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States:

- In the case of a disregarded entity with a U.S. owner, the U.S. owner of the disregarded entity and not the entity;
- In the case of a grantor trust with a U.S. grantor or other U.S. owner, generally, the U.S. grantor or other U.S. owner of the grantor trust and not the trust; and
- In the case of a U.S. trust (other than a grantor trust), the U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

**Foreign person.** If you are a foreign person or the U.S. branch of a foreign bank that has elected to be treated as a U.S. person, do not use Form W-9. Instead, use the appropriate Form W-8 or Form 8233 (see Publication 515, Withholding of Tax on Nonresident Aliens and Foreign Entities).

**Nonresident alien who becomes a resident alien.** Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items:

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.
2. The treaty article addressing the income.
3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.
4. The type and amount of income that qualifies for the exemption from tax.
5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

**Example.** Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity, give the requester the appropriate completed Form W-8 or Form 8233.

## Backup Withholding

**What is backup withholding?** Persons making certain payments to you must under certain conditions withhold and pay to the IRS 28% of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, payments made in settlement of payment card and third party network transactions, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

**Payments you receive will be subject to backup withholding if:**

1. You do not furnish your TIN to the requester,
2. You do not certify your TIN when required (see the Part II instructions on page 3 for details),

3. The IRS tells the requester that you furnished an incorrect TIN,

4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or

5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See *Exempt payee code* on page 3 and the separate Instructions for the Requester of Form W-9 for more information.

Also see *Special rules for partnerships* above.

## What is FATCA reporting?

The Foreign Account Tax Compliance Act (FATCA) requires a participating foreign financial institution to report all United States account holders that are specified United States persons. Certain payees are exempt from FATCA reporting. See *Exemption from FATCA reporting code* on page 3 and the Instructions for the Requester of Form W-9 for more information.

## Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you no longer are tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account; for example, if the grantor of a grantor trust dies.

## Penalties

**Failure to furnish TIN.** If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

**Civil penalty for false information with respect to withholding.** If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

**Criminal penalty for falsifying information.** Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

**Misuse of TINs.** If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

## Specific Instructions

### Line 1

You must enter one of the following on this line; **do not** leave this line blank. The name should match the name on your tax return.

If this Form W-9 is for a joint account, list first, and then circle, the name of the person or entity whose number you entered in Part I of Form W-9.

a. **Individual.** Generally, enter the name shown on your tax return. If you have changed your last name without informing the Social Security Administration (SSA) of the name change, enter your first name, the last name as shown on your social security card, and your new last name.

**Note. ITIN applicant:** Enter your individual name as it was entered on your Form W-7 application, line 1a. This should also be the same as the name you entered on the Form 1040/1040A/1040EZ you filed with your application.

b. **Sole proprietor or single-member LLC.** Enter your individual name as shown on your 1040/1040A/1040EZ on line 1. You may enter your business, trade, or "doing business as" (DBA) name on line 2.

c. **Partnership, LLC that is not a single-member LLC, C Corporation, or S Corporation.** Enter the entity's name as shown on the entity's tax return on line 1 and any business, trade, or DBA name on line 2.

d. **Other entities.** Enter your name as shown on required U.S. federal tax documents on line 1. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on line 2.

e. **Disregarded entity.** For U.S. federal tax purposes, an entity that is disregarded as an entity separate from its owner is treated as a "disregarded entity." See Regulations section 301.7701-2(c)(2)(iii). Enter the owner's name on line 1. The name of the entity entered on line 1 should never be a disregarded entity. The name on line 1 should be the name shown on the income tax return on which the income should be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a single owner that is a U.S. person, the U.S. owner's name is required to be provided on line 1. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity's name on line 2, "Business name/disregarded entity name." If the owner of the disregarded entity is a foreign person, the owner must complete an appropriate Form W-8 instead of a Form W-9. This is the case even if the foreign person has a U.S. TIN.



**Line 2**

If you have a business name, trade name, DBA name, or disregarded entity name, you may enter it on line 2.

**Line 3**

Check the appropriate box in line 3 for the U.S. federal tax classification of the person whose name is entered on line 1. Check only one box in line 3.

**Limited Liability Company (LLC).** If the name on line 1 is an LLC treated as a partnership for U.S. federal tax purposes, check the "Limited Liability Company" box and enter "P" in the space provided. If the LLC has filed Form 8832 or 2553 to be taxed as a corporation, check the "Limited Liability Company" box and in the space provided enter "C" for C corporation or "S" for S corporation. If it is a single-member LLC that is a disregarded entity, do not check the "Limited Liability Company" box; instead check the first box in line 3 "Individual/sole proprietor or single-member LLC."

**Line 4, Exemptions**

If you are exempt from backup withholding and/or FATCA reporting, enter in the appropriate space in line 4 any code(s) that may apply to you.

**Exempt payee code.**

- Generally, individuals (including sole proprietors) are not exempt from backup withholding.
- Except as provided below, corporations are exempt from backup withholding for certain payments, including interest and dividends.
- Corporations are not exempt from backup withholding for payments made in settlement of payment card or third party network transactions.
- Corporations are not exempt from backup withholding with respect to attorneys' fees or gross proceeds paid to attorneys, and corporations that provide medical or health care services are not exempt with respect to payments reportable on Form 1099-MISC.

The following codes identify payees that are exempt from backup withholding. Enter the appropriate code in the space in line 4.

- 1—An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2)
- 2—The United States or any of its agencies or instrumentalities
- 3—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities
- 4—A foreign government or any of its political subdivisions, agencies, or instrumentalities
- 5—A corporation
- 6—A dealer in securities or commodities required to register in the United States, the District of Columbia, or a U.S. commonwealth or possession
- 7—A futures commission merchant registered with the Commodity Futures Trading Commission
- 8—A real estate investment trust
- 9—An entity registered at all times during the tax year under the Investment Company Act of 1940
- 10—A common trust fund operated by a bank under section 584(a)
- 11—A financial institution
- 12—A middleman known in the investment community as a nominee or custodian
- 13—A trust exempt from tax under section 664 or described in section 4947

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 13.

IF the payment is for . . .	THEN the payment is exempt for . . .
Interest and dividend payments	All exempt payees except for 7
Broker transactions	Exempt payees 1 through 4 and 6 through 11 and all C corporations. S corporations must not enter an exempt payee code because they are exempt only for sales of noncovered securities acquired prior to 2012.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 4
Payments over \$600 required to be reported and direct sales over \$5,000 <sup>1</sup>	Generally, exempt payees 1 through 5 <sup>2</sup>
Payments made in settlement of payment card or third party network transactions	Exempt payees 1 through 4

<sup>1</sup> See Form 1099-MISC, Miscellaneous Income, and its instructions.

<sup>2</sup> However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney reportable under section 6045(f), and payments for services paid by a federal executive agency.

**Exemption from FATCA reporting code.** The following codes identify payees that are exempt from reporting under FATCA. These codes apply to persons submitting this form for accounts maintained outside of the United States by certain foreign financial institutions. Therefore, if you are only submitting this form for an account you hold in the United States, you may leave this field blank. Consult with the person requesting this form if you are uncertain if the financial institution is subject to these requirements. A requester may indicate that a code is not required by providing you with a Form W-9 with "Not Applicable" (or any similar indication) written or printed on the line for a FATCA exemption code.

- A—An organization exempt from tax under section 501(a) or any individual retirement plan as defined in section 7701(a)(37)
- B—The United States or any of its agencies or instrumentalities
- C—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities
- D—A corporation the stock of which is regularly traded on one or more established securities markets, as described in Regulations section 1.1472-1(c)(1)(i)
- E—A corporation that is a member of the same expanded affiliated group as a corporation described in Regulations section 1.1472-1(c)(1)(i)
- F—A dealer in securities, commodities, or derivative financial instruments (including notional principal contracts, futures, forwards, and options) that is registered as such under the laws of the United States or any state
- G—A real estate investment trust
- H—A regulated investment company as defined in section 851 or an entity registered at all times during the tax year under the Investment Company Act of 1940
  - I—A common trust fund as defined in section 584(a)
  - J—A bank as defined in section 581
  - K—A broker
  - L—A trust exempt from tax under section 664 or described in section 4947(a)(1)
  - M—A tax exempt trust under a section 403(b) plan or section 457(g) plan

**Note.** You may wish to consult with the financial institution requesting this form to determine whether the FATCA code and/or exempt payee code should be completed.

**Line 5**

Enter your address (number, street, and apartment or suite number). This is where the requester of this Form W-9 will mail your information returns.

**Line 6**

Enter your city, state, and ZIP code.

**Part I. Taxpayer Identification Number (TIN)**

**Enter your TIN in the appropriate box.** If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN. However, the IRS prefers that you use your SSN.

If you are a single-member LLC that is disregarded as an entity separate from its owner (see *Limited Liability Company (LLC)* on this page), enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

**Note.** See the chart on page 4 for further clarification of name and TIN combinations.

**How to get a TIN.** If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local SSA office or get this form online at [www.ssa.gov](http://www.ssa.gov). You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at [www.irs.gov/businesses](http://www.irs.gov/businesses) and clicking on Employer Identification Number (EIN) under Starting a Business. You can get Forms W-7 and SS-4 from the IRS by visiting [IRS.gov](http://IRS.gov) or by calling 1-800-TAX-FORM (1-800-829-3676).

If you are asked to complete Form W-9 but do not have a TIN, apply for a TIN and write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

**Note.** Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

**Caution:** A disregarded U.S. entity that has a foreign owner must use the appropriate Form W-8.

## Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if items 1, 4, or 5 below indicate otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on line 1 must sign. Exempt payees, see *Exempt payee code* earlier.

**Signature requirements.** Complete the certification as indicated in items 1 through 5 below.

**1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983.** You must give your correct TIN, but you do not have to sign the certification.

**2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983.** You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

**3. Real estate transactions.** You must sign the certification. You may cross out item 2 of the certification.

**4. Other payments.** You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments made in settlement of payment card and third party network transactions, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

**5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions.** You must give your correct TIN, but you do not have to sign the certification.

## What Name and Number To Give the Requester

For this type of account:	Give name and SSN of:
1. Individual	The individual
2. Two or more individuals (joint account)	The actual owner of the account or, if combined funds, the first individual on the account <sup>1</sup>
3. Custodian account of a minor (Uniform Gift to Minors Act)	The minor <sup>2</sup>
4. a. The usual revocable savings trust (grantor is also trustee) b. So-called trust account that is not a legal or valid trust under state law	The grantor-trustee <sup>1</sup>  The actual owner <sup>1</sup>
5. Sole proprietorship or disregarded entity owned by an individual	The owner <sup>3</sup>
6. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulations section 1.671-4(b)(2)(i)(A))	The grantor <sup>4</sup>
For this type of account:	Give name and EIN of:
7. Disregarded entity not owned by an individual	The owner
8. A valid trust, estate, or pension trust	Legal entity <sup>1</sup>
9. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
10. Association, club, religious, charitable, educational, or other tax-exempt organization	The organization
11. Partnership or multi-member LLC	The partnership
12. A broker or registered nominee	The broker or nominee
13. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
14. Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulations section 1.671-4(b)(2)(i)(B))	The trust

<sup>1</sup> List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

<sup>2</sup> Circle the minor's name and furnish the minor's SSN.

<sup>3</sup> You must show your individual name and you may also enter your business or DBA name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

<sup>4</sup> List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships* on page 2.

**Note.** Grantor also must provide a Form W-9 to trustee of trust.

**Note.** If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

## Secure Your Tax Records from Identity Theft

Identity theft occurs when someone uses your personal information such as your name, SSN, or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN,
- Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity or credit report, contact the IRS Identity Theft Hotline at 1-800-908-4490 or submit Form 14039.

For more information, see Publication 4535, *Identity Theft Prevention and Victim Assistance*.

Victims of identity theft who are experiencing economic harm or a system problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

**Protect yourself from suspicious emails or phishing schemes.** Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to [phishing@irs.gov](mailto:phishing@irs.gov). You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration (TIGTA) at 1-800-368-4484. You can forward suspicious emails to the Federal Trade Commission at: [spam@uce.gov](mailto:spam@uce.gov) or contact them at [www.ftc.gov/idtheft](http://www.ftc.gov/idtheft) or 1-877-IDTHEFT (1-877-438-4338).

Visit [IRS.gov](http://IRS.gov) to learn more about identity theft and how to reduce your risk.

## Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. commonwealths and possessions for use in administering their laws. The information also may be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payers must generally withhold a percentage of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to the payer. Certain penalties may also apply for providing false or fraudulent information.



**2017 Withholding Exemption Certificate****590**

The payee completes this form and submits it to the withholding agent. The withholding agent keeps this form with their records.

**Withholding Agent Information**

Name \_\_\_\_\_

**Payee Information**

Name \_\_\_\_\_

☐ SSN or ITIN ☐ FEIN ☐ CA Corp no. ☐ CA SOS file no.

Address (apt./sta., room, PO box, or PMB no.) \_\_\_\_\_

City (if you have a foreign address, see instructions.) \_\_\_\_\_

State \_\_\_\_\_ ZIP code \_\_\_\_\_

**Exemption Reason****Check only one box.**

By checking the appropriate box below, the payee certifies the reason for the exemption from the California income tax withholding requirements on payment(s) made to the entity or individual.

☐ **Individuals — Certification of Residency:**

I am a resident of California and I reside at the address shown above. If I become a nonresident at any time, I will promptly notify the withholding agent. See instructions for General Information D, Definitions.

☐ **Corporations:**

The corporation has a permanent place of business in California at the address shown above or is qualified through the California Secretary of State (SOS) to do business in California. The corporation will file a California tax return. If this corporation ceases to have a permanent place of business in California or ceases to do any of the above, I will promptly notify the withholding agent. See instructions for General Information D, Definitions.

☐ **Partnerships or Limited Liability Companies (LLCs):**

The partnership or LLC has a permanent place of business in California at the address shown above or is registered with the California SOS, and is subject to the laws of California. The partnership or LLC will file a California tax return. If the partnership or LLC ceases to do any of the above, I will promptly inform the withholding agent. For withholding purposes, a limited liability partnership (LLP) is treated like any other partnership.

☐ **Tax-Exempt Entities:**

The entity is exempt from tax under California Revenue and Taxation Code (R&amp;TC) Section 23701 \_\_\_\_\_ (insert letter) or Internal Revenue Code Section 501(c) \_\_\_\_\_ (insert number). If this entity ceases to be exempt from tax, I will promptly notify the withholding agent. Individuals cannot be tax-exempt entities.

☐ **Insurance Companies, Individual Retirement Arrangements (IRAs), or Qualified Pension/Profit-Sharing Plans:**

The entity is an insurance company, IRA, or a federally qualified pension or profit-sharing plan.

☐ **California Trusts:**

At least one trustee and one noncontingent beneficiary of the above-named trust is a California resident. The trust will file a California fiduciary tax return. If the trustee or noncontingent beneficiary becomes a nonresident at any time, I will promptly notify the withholding agent.

☐ **Estates — Certification of Residency of Deceased Person:**

I am the executor of the above-named person's estate or trust. The decedent was a California resident at the time of death. The estate will file a California fiduciary tax return.

☐ **Nonmilitary Spouse of a Military Servicemember:**

I am a nonmilitary spouse of a military servicemember and I meet the Military Spouse Residency Relief Act (MSRRA) requirements. See instructions for General Information E, MSRRA.

**CERTIFICATE OF PAYEE:** Payee must complete and sign below.To learn about your privacy rights, how we may use your information, and the consequences for not providing the requested information, go to [ftb.ca.gov](http://ftb.ca.gov) and search for **privacy notice**. To request this notice by mail, call 800.852.5711.

Under penalties of perjury, I declare that I have examined the information on this form, including accompanying schedules and statements, and to the best of my knowledge and belief, it is true, correct, and complete. I further declare under penalties of perjury that if the facts upon which this form are based change, I will promptly notify the withholding agent.

Type or print payee's name and title \_\_\_\_\_

Telephone (\_\_\_\_) \_\_\_\_\_

Payee's signature \_\_\_\_\_

Date \_\_\_\_\_

# 2017 Instructions for Form 590

## Withholding Exemption Certificate

References in these instructions are to the California Revenue and Taxation Code (R&TC).

### General Information

**Registered Domestic Partners (RDP)** – For purposes of California income tax, references to a spouse, husband, or wife also refer to a Registered Domestic Partner (RDP) unless otherwise specified. For more information on RDPs, get FTB Pub. 737, Tax Information for Registered Domestic Partners.

#### A Purpose

Use Form 590, Withholding Exemption Certificate, to certify an exemption from nonresident withholding.

Form 590 does not apply to payments of backup withholding. For more information, go to [ftb.ca.gov](http://ftb.ca.gov) and search for **backup withholding**.

Form 590 does not apply to payments for wages to employees. Wage withholding is administered by the California Employment Development Department (EDD). For more information, go to [edd.ca.gov](http://edd.ca.gov) or call 888.745.3886.

**Do not** use Form 590 to certify an exemption from withholding if you are a **Seller of California real estate**. Sellers of California real estate use Form 593-C, Real Estate Withholding Certificate, to claim an exemption from the real estate withholding requirement.

**The following are excluded from withholding and completing this form:**

- The United States and any of its agencies or instrumentalities.
- A state, a possession of the United States, the District of Columbia, or any of its political subdivisions or instrumentalities.
- A foreign government or any of its political subdivisions, agencies, or instrumentalities.

#### B Income Subject to Withholding

California Revenue and Taxation Code (R&TC) Section 18662 requires withholding of income or franchise tax on payments of California source income made to nonresidents of California.

Withholding is required on the following, but is not limited to:

- Payments to nonresidents for services rendered in California.
- Distributions of California source income made to domestic nonresident partners, members, and S corporation shareholders and allocations of California source income made to foreign partners and members.
- Payments to nonresidents for rents if the payments are made in the course of the withholding agent's business.
- Payments to nonresidents for royalties from activities sourced to California.

- Distributions of California source income to nonresident beneficiaries from an estate or trust.
- Endorsement payments received for services performed in California.
- Prizes and winnings received by nonresidents for contests in California.

However, withholding is optional if the total payments of California source income are \$1,500 or less during the calendar year.

For more information on withholding get FTB Pub. 1017, Resident and Nonresident Withholding Guidelines. To get a withholding publication, see Additional Information.

#### C Who Certifies this Form

Form 590 is certified by the payee. California residents or entities exempt from the withholding requirement should complete Form 590 and submit it to the withholding agent before payment is made. The withholding agent is then relieved of the withholding requirements if the agent relies in good faith on a completed and signed Form 590 unless notified by the Franchise Tax Board (FTB) that the form should not be relied upon.

An incomplete certificate is invalid and the withholding agent should not accept it. If the withholding agent receives an incomplete certificate, the withholding agent is required to withhold tax on payments made to the payee until a valid certificate is received. In lieu of a completed exemption certificate, the withholding agent may accept a letter from the payee as a substitute explaining why they are not subject to withholding. The letter must contain all the information required on the certificate in similar language, including the under penalty of perjury statement and the payee's taxpayer identification number (TIN). The withholding agent must retain a copy of the certificate or substitute for at least five years after the last payment to which the certificate applies, and provide it upon request to the FTB.

If an entertainer (or the entertainer's business entity) is paid for a performance, the entertainer's information must be provided. **Do not** submit the entertainer's agent or promoter information.

The grantor of a grantor trust shall be treated as the payee for withholding purposes. Therefore, if the payee is a grantor trust and one or more of the grantors is a nonresident, withholding is required. If all of the grantors on the trust are residents, no withholding is required. Resident grantors can check the box on Form 590 labeled "Individuals — Certification of Residency."

#### D Definitions

For California nonwage withholding purposes, **nonresident** includes all of the following:

- Individuals who are not residents of California.
- Corporations not qualified through the California Secretary of State (CA SOS) to do business in California or having no permanent place of business in California.
- Partnerships or limited liability companies (LLCs) with no permanent place of business in California.
- Any trust without a resident grantor, beneficiary, or trustee, or estates where the decedent was not a California resident.

Foreign refers to non-U.S.

For more information about determining resident status, get FTB Pub. 1031, Guidelines for Determining Resident Status. Military servicemembers have special rules for residency. For more information, get FTB Pub. 1032, Tax Information for Military Personnel.

#### Permanent Place of Business:

A corporation has a permanent place of business in California if it is organized and existing under the laws of California or it has qualified through the CA SOS to transact intrastate business. A corporation that has not qualified to transact intrastate business (e.g., a corporation engaged exclusively in interstate commerce) will be considered as having a permanent place of business in California only if it maintains a permanent office in California that is permanently staffed by its employees.

#### E Military Spouse Residency Relief Act (MSRRA)

Generally, for tax purposes you are considered to maintain your existing residence or domicile. If a military servicemember and nonmilitary spouse have the same state of domicile, the MSRRA provides:

- A spouse shall not be deemed to have lost a residence or domicile in any state solely by reason of being absent to be with the servicemember serving in compliance with military orders.
- A spouse shall not be deemed to have acquired a residence or domicile in any other state solely by reason of being there to be with the servicemember serving in compliance with military orders.

**Domicile** is defined as the one place:

- Where you maintain a true, fixed, and permanent home.
- To which you intend to return whenever you are absent.

A military servicemember's nonmilitary spouse is considered a nonresident for tax purposes if the servicemember and spouse have the same domicile outside of California and the spouse is in California solely to be with the servicemember who is serving in compliance with Permanent Change of Station orders.

California may require nonmilitary spouses of military servicemembers to provide proof that they meet the criteria for California personal income tax exemption as set forth in the MSRRRA.

Income of a military servicemember's nonmilitary spouse for services performed in California is not California source income subject to state tax if the spouse is in California to be with the servicemember serving in compliance with military orders, and the servicemember and spouse have the same domicile in a state other than California.

For additional information or assistance in determining whether the applicant meets the MSRRRA requirements, get FTB Pub. 1032.

## Specific Instructions

### Payee Instructions

Enter the withholding agent's name.

Enter the payee's information, including the TIN and check the appropriate TIN box.

You must provide a valid TIN as requested on this form. The following are acceptable TINs: social security number (SSN); individual taxpayer identification number (ITIN); federal employer identification number (FEIN); California corporation number (CA Corp no.); or CA SOS file number.

**Private Mail Box (PMB)** – Include the PMB in the address field. Write "PMB" first, then the box number. Example: 111 Main Street PMB 123.

**Foreign Address** – Follow the country's practice for entering the city, county, province, state, country, and postal code, as applicable, in the appropriate boxes. **Do not** abbreviate the country name.

**Exemption Reason** – Check the box that reflects the reason why the payee is exempt from the California income tax withholding requirement.

### Withholding Agent Instructions

**Do not** send this form to the FTB. The withholding agent retains this form for a minimum of five years or until the payee's status changes, and must provide this form to the FTB upon request.

The payee must notify the withholding agent if any of the following situations occur:

- The individual payee becomes a nonresident.
- The corporation ceases to have a permanent place of business in California or ceases to be qualified to do business in California.

- The partnership ceases to have a permanent place of business in California.
- The LLC ceases to have a permanent place of business in California.
- The tax-exempt entity loses its tax-exempt status.

If any of these situations occur, then withholding may be required. For more information, get Form 592, Resident and Nonresident Withholding Statement, Form 592-B, Resident and Nonresident Withholding Tax Statement, and Form 592-V, Payment Voucher for Resident and Nonresident Withholding.

## Additional Information

**Website:** For more information go to [ftb.ca.gov](http://ftb.ca.gov) and search for **nonwage**.  
**MyFTB** offers secure online tax account information and services. For more information and to register, go to [ftb.ca.gov](http://ftb.ca.gov) and search for **myftb**.

**Telephone:** 888.792.4900 or 916.845.4900, Withholding Services and Compliance phone service

**Fax:** 916.845.9512

**Mail:** WITHHOLDING SERVICES AND COMPLIANCE MS F182  
FRANCHISE TAX BOARD  
PO BOX 942867  
SACRAMENTO CA 94267-0651

For questions unrelated to withholding, or to download, view, and print California tax forms and publications, or to access the TTY/TDD numbers, see the information below.

### Internet and Telephone Assistance

**Website:** [ftb.ca.gov](http://ftb.ca.gov)

**Telephone:** 800.852.5711 from within the United States  
916.845.6500 from outside the United States

**TTY/TDD:** 800.822.6268 for persons with hearing or speech impairments

### Asistencia Por Internet y Telefono

**Sitio web:** [ftb.ca.gov](http://ftb.ca.gov)

**Telefono:** 800.852.5711 dentro de los Estados Unidos  
916.845.6500 fuera de los Estados Unidos

**TTY/TDD:** 800.822.6268 para personas con discapacidades auditivas o de habla

## MSRC Prospective Contractor Information

1. Contractor (Legal Name): \_\_\_\_\_

2. Brief Description of Project: \_\_\_\_\_

3. Did Contractor retain a consultant to help prepare the funding application?

☐ Yes    ☐ No

**If YES, identify consultant below and then sign and date the form. If NO, sign and date below.**

Name of Consultant \_\_\_\_\_

**I declare the foregoing disclosure to be true and correct.**

Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

## DISADVANTAGED BUSINESS CERTIFICATION

Federal guidance for utilization of disadvantaged business enterprises allows a vendor to be deemed a small business enterprise (SBE), minority

business enterprise (MBE) or women business enterprise (WBE) if it meets the criteria below.

- is certified by the Small Business Administration or
- is certified by a state or federal agency or
- is an independent MBE(s) or WBE(s) business concern which is at least 51 percent owned and controlled by minority group member(s) who are citizens of the United States.

### Statements of certification:

As a prime contractor to the SCAQMD, \_\_\_\_\_ (name of business) will engage in good faith efforts to achieve the fair share in accordance with 40 CFR Section 33.301, and will follow the six affirmative steps listed below **for contracts or purchase orders funded in whole or in part by federal grants and contracts.**

1. Place qualified SBEs, MBEs, and WBEs on solicitation lists.
2. Assure that SBEs, MBEs, and WBEs are solicited whenever possible.
3. When economically feasible, divide total requirements into small tasks or quantities to permit greater participation by SBEs, MBEs, and WBEs.
4. Establish delivery schedules, if possible, to encourage participation by SBEs, MBEs, and WBEs.
5. Use services of Small Business Administration, Minority Business Development Agency of the Department of Commerce, and/or any agency authorized as a clearinghouse for SBEs, MBEs, and WBEs.
6. If subcontracts are to be let, take the above affirmative steps.

### **Self-Certification Verification: Also for use in awarding additional points, as applicable, in accordance with SCAQMD Procurement Policy and Procedure:**

Check all that apply:

- |   |  |
|---|--|
| <input type="checkbox"/> Small Business Enterprise/Small Business Joint Venture | <input type="checkbox"/> Women-owned Business Enterprise                               |
| <input type="checkbox"/> Local business   | <input type="checkbox"/> Disabled Veteran-owned Business Enterprise/DVBE Joint Venture |
| <input type="checkbox"/> Minority-owned Business Enterprise                     |  |

Percent of ownership: \_\_\_\_\_ %

Name of Qualifying Owner(s): \_\_\_\_\_

**State of California Public Works Contractor Registration No. \_\_\_\_\_ MUST BE INCLUDED IF BID PROPOSAL IS FOR PUBLIC WORKS PROJECT, AS APPLICABLE.**

I, the undersigned, hereby declare that to the best of my knowledge the above information is accurate. Upon penalty of perjury, I certify information submitted is factual.

\_\_\_\_\_  
A. NAME

\_\_\_\_\_  
TITLE

\_\_\_\_\_  
B. TELEPHONE NUMBER

\_\_\_\_\_  
DATE

## **Definitions**

**Disabled Veteran-Owned Business Enterprise** means a business that meets all of the following criteria:

- is a sole proprietorship or partnership of which is at least 51 percent owned by one or more disabled veterans, or in the case of any business whose stock is publicly held, at least 51 percent of the stock is owned by one or more disabled veterans; a subsidiary which is wholly owned by a parent corporation but only if at least 51 percent of the voting stock of the parent corporation is owned by one or more disabled veterans; or a joint venture in which at least 51 percent of the joint venture's management and control and earnings are held by one or more disabled veterans.
- the management and control of the daily business operations are by one or more disabled veterans. The disabled veterans who exercise management and control are not required to be the same disabled veterans as the owners of the business.
- is a sole proprietorship, corporation, partnership, or joint venture with its primary headquarters office located in the United States and which is not a branch or subsidiary of a foreign corporation, firm, or other foreign-based business.

**Joint Venture** means that one party to the joint venture is a DVBE and owns at least 51 percent of the joint venture. In the case of a joint venture formed for a single project this means that DVBE will receive at least 51 percent of the project dollars.

**Local Business** means a business that meets all of the following criteria:

- has an ongoing business within the boundary of the SCAQMD at the time of bid application.
- performs 90 percent of the work within SCAQMD's jurisdiction.

**Minority-Owned Business Enterprise** means a business that meets all of the following criteria:

- is at least 51 percent owned by one or more minority persons or in the case of any business whose stock is publicly held, at least 51 percent of the stock is owned by one or more minority persons.
- is a business whose management and daily business operations are controlled or owned by one or more minority person.
- is a business which is a sole proprietorship, corporation, partnership, joint venture, an association, or a cooperative with its primary headquarters office located in the United States, which is not a branch or subsidiary of a foreign corporation, foreign firm, or other foreign business.

"Minority" person means a Black American, Hispanic American, Native American (including American Indian, Eskimo, Aleut, and Native Hawaiian), Asian-Indian American (including a person whose origins are from India, Pakistan, or Bangladesh), Asian-Pacific American (including a person whose origins are from Japan, China, the Philippines, Vietnam, Korea, Samoa, Guam, the United States Trust Territories of the Pacific, Northern Marianas, Laos, Cambodia, or Taiwan).

**Small Business Enterprise** means a business that meets the following criteria:

- a. 1) an independently owned and operated business; 2) not dominant in its field of operation; 3) together with affiliates is either:
  - **A service, construction, or non-manufacturer with 100 or fewer employees, and average annual gross receipts of ten million dollars (\$10,000,000) or less over the previous three years, or**
  - A manufacturer with 100 or fewer employees.
- b. Manufacturer means a business that is both of the following:
  - 1) Primarily engaged in the chemical or mechanical transformation of raw materials or processed substances into new products.



- 2) Classified between Codes 311000 to 339000, inclusive, of the North American Industrial Classification System (NAICS) Manual published by the United States Office of Management and Budget, 2007 edition.

**Small Business Joint Venture** means that one party to the joint venture is a Small Business and owns at least 51 percent of the joint venture. In the case of a joint venture formed for a single project this means that the Small Business will receive at least 51 percent of the project dollars.

**Women-Owned Business Enterprise** means a business that meets all of the following criteria:

- is at least 51 percent owned by one or more women or in the case of any business whose stock is publicly held, at least 51 percent of the stock is owned by one or more women.
- is a business whose management and daily business operations are controlled or owned by one or more women.
- is a business which is a sole proprietorship, corporation, partnership, or a joint venture, with its primary headquarters office located in the United States, which is not a branch or subsidiary of a foreign corporation, foreign firm, or other foreign business.



## CAMPAIGN CONTRIBUTIONS DISCLOSURE

In accordance with California law, bidders and contracting parties are required to disclose, at the time the application is filed, information relating to any campaign contributions made to Board Members or members/alternates of the MSRC, including: the name of the party making the contribution (which includes any parent, subsidiary or otherwise related business entity, as defined below), the amount of the contribution, and the date the contribution was made. 2 C.C.R. §18438.8(b).

California law prohibits a party, or an agent, from making campaign contributions to SCAQMD Governing Board Members or members/alternates of the Mobile Source Air Pollution Reduction Review Committee (MSRC) of more than \$250 while their contract or permit is pending before the SCAQMD; and further prohibits a campaign contribution from being made for three (3) months following the date of the final decision by the Governing Board or the MSRC on a donor's contract or permit. Gov't Code §84308(d). For purposes of reaching the \$250 limit, the campaign contributions of the bidder or contractor plus contributions by its parents, affiliates, and related companies of the contractor or bidder are added together. 2 C.C.R. §18438.5.

In addition, Board Members or members/alternates of the MSRC must abstain from voting on a contract or permit if they have received a campaign contribution from a party or participant to the proceeding, or agent, totaling more than \$250 in the 12-month period prior to the consideration of the item by the Governing Board or the MSRC. Gov't Code §84308(c).

The list of current SCAQMD Governing Board Members can be found at the SCAQMD website ([www.aqmd.gov](http://www.aqmd.gov)). The list of current MSRC members/alternates can be found at the MSRC website (<http://www.cleantransportationfunding.org>).

### **SECTION I.**

**Contractor (Legal Name):** \_\_\_\_\_

- |   |
|---|
| <input type="checkbox"/> DBA, Name _____, County Filed in _____ |
| <input type="checkbox"/> Corporation, ID No. _____              |
| <input type="checkbox"/> LLC/LLP, ID No. _____                  |

**List any parent, subsidiaries, or otherwise affiliated business entities of Contractor:**  
(See definition below).

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### **SECTION II.**

Has Contractor and/or any parent, subsidiary, or affiliated company, or agent thereof, made a campaign contribution(s) totaling \$250 or more in the aggregate to a current member of the South

Coast Air Quality Management Governing Board or member/alternate of the MSRC in the 12 months preceding the date of execution of this disclosure?

☐ Yes    ☐ No

**If YES, complete Section II below and then sign and date the form.  
If NO, sign and date below. Include this form with your submittal.**

**Campaign Contributions Disclosure, *continued*:**

Name of Contributor \_\_\_\_\_

_____	_____	_____
Governing Board Member or MSRC Member/Alternate	Amount of Contribution	Date of Contribution

Name of Contributor \_\_\_\_\_

_____	_____	_____
Governing Board Member or MSRC Member/Alternate	Amount of Contribution	Date of Contribution

Name of Contributor \_\_\_\_\_

_____	_____	_____
Governing Board Member or MSRC Member/Alternate	Amount of Contribution	Date of Contribution

Name of Contributor \_\_\_\_\_

_____	_____	_____
Governing Board Member or MSRC Member/Alternate	Amount of Contribution	Date of Contribution

**I declare the foregoing disclosures to be true and correct.**

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

## DEFINITIONS

**Parent, Subsidiary, or Otherwise Related Business Entity (2 Cal. Code of Regs., §18703.1(d).)**

- (1) Parent subsidiary.** A parent subsidiary relationship exists when one corporation directly or indirectly owns shares possessing more than 50 percent of the voting power of another corporation.
- (2) Otherwise related business entity.** Business entities, including corporations, partnerships, joint ventures and any other organizations and enterprises operated for profit, which do not have a parent subsidiary relationship are otherwise related if any one of the following three tests is met:

- (A) One business entity has a controlling ownership interest in the other business entity.**
- (B) There is shared management and control between the entities. In determining whether there is shared management and control, consideration should be given to the following factors:**
  - (i) The same person or substantially the same person owns and manages the two entities;**
  - (ii) There are common or commingled funds or assets;**
  - (iii) The business entities share the use of the same offices or employees, or otherwise share activities, resources or personnel on a regular basis;**
  - (iv) There is otherwise a regular and close working relationship between the entities; or**
- (C) A controlling owner (50% or greater interest as a shareholder or as a general partner) in one entity also is a controlling owner in the other entity.**



# **Natural Gas Infrastructure Funding Opportunities**

**For New and Expanded Refueling Facilities in the South Coast  
Air Quality Management District**

**Program Announcement**

**PA2017-07**

**June 2, 2017**

## SECTION 1 - INTRODUCTION

The Mobile Source Air Pollution Reduction Review Committee (MSRC) is pleased to announce the availability of **Clean Transportation Funding™** to assist in the construction of Natural Gas Refueling Infrastructure within the South Coast Air Quality Management District (SCAQMD).

This funding opportunity has at its core the following goals and objectives:

- Offer funding opportunities to *most*, if not all, entities interested in pursuing natural gas infrastructure projects, including public and private site owners, fleet owners, infrastructure providers, fuel providers, and school districts;
- Provide incentives for the construction or expansion of natural gas refueling stations;
- Provide an additional funding incentive for refueling stations that utilize natural gas produced from renewable sources;
- Offer incentives to fleets to upgrade their existing vehicle maintenance facilities to accommodate indoor maintenance of gaseous-fuel vehicles;
- Support the training of technicians in the maintenance of natural gas-fueled vehicles and infrastructure;
- Support fleets purchasing natural gas vehicles in compliance with the SCAQMD Fleet Rules, or pursuing vehicle incentives under the SCAQMD Carl Moyer Program.

To reduce the need to photocopy, package, and physically submit paper applications, the 2017 Edition of the Natural Gas Infrastructure Program ***requires that applications be submitted electronically in PDF format using the MSRC Website***. We believe this benefits the applicant, the MSRC staff, and the environment.

The following Sections describe requirements for participation, guidelines for application preparation, as well as maximum incentive levels available as a function of the type of refueling infrastructure proposed and type of entity requesting funding assistance. The Natural Gas Infrastructure Program is not a competition in the traditional sense. Funding will be distributed on a first-come, first-served basis to applicants that satisfy specified project requirements. However, as funding is limited, the availability of funds cannot be guaranteed.

MSRC staff members are available to answer questions and provide technical and programmatic guidance as appropriate during the entire application preparation period. Please refer to Section 6 of this document for a list of MSRC Staff contacts.

## SECTION 2 - PARTICIPATION GUIDELINES

The following guidelines, requirements, and conditions have been established and apply to all applicants:

1. **Funding Availability** - The amount of MSRC Clean Transportation Funding™ allocated for the Natural Gas Infrastructure Program is \$4,000,000. Of this amount, a maximum of \$150,000 may be awarded for technician training.

Please note that this funding level is a targeted amount – should meritorious projects be received totaling greater than the current funding allocation of \$4,000,000, the MSRC reserves the right to increase the amount of total funding available. Also, should the MSRC receive applications with total requests less than the amount allocated, or if proposals are deemed non-meritorious, the MSRC reserves the right to reduce the total funding available and reallocate funds to other Work Program categories. The MSRC also reserves the right to not fund any of the applications received, irrespective of the merits of the applications submitted.

***For the purpose of this Program, all qualified project applications received electronically on or before 11:59 p.m. on the first day of the Application Acceptance Period, June 2, 2017, will be deemed received at the same time.*** In the event the Program is oversubscribed following receipt of first-day applications, an across-the-board pro-rating factor will be determined so that all qualified project applications will receive the same percentage of the award to which they would otherwise have been entitled pursuant to the Program terms. Please note that the Geographic Funding Minimums discussed in paragraph 2, below, will take precedence in the event funding must be pro-rated. ***Qualifying applications received after 11:59 p.m. on June 2, 2017 will be funded in the order of receipt.***

Please note that the source of MSRC Clean Transportation Funding™ for projects submitted in response to this solicitation is motor vehicle registration fees collected by the California Department of Motor Vehicles (DMV) in accordance with the California Health and Safety Code. Thus, the availability of MSRC Clean Transportation Funding™ is contingent upon the timely receipt of funds from the DMV. Neither the MSRC nor SCAQMD can guarantee the collection or remittance of registration fees by the DMV.

2. **Geographical Funding Minimum** - The MSRC has established a Geographical Funding Minimum for each county within the SCAQMD. The geographical funding minimum amount has been set at \$500,000 per county. This funding set-aside guarantees a minimum level of funding for each county to implement natural gas infrastructure projects. At the end of the application submittal period, June 29, 2018, if any county has funds remaining in its geographical minimum, these funds will be made available to qualifying projects from any other county in order of receipt.
3. **Eligible Applicants** – Most entities interested in implementing natural gas refueling station projects within the SCAQMD jurisdiction are welcome to participate in the Program. Eligible applicants include, but are not necessarily restricted to:
  - Infrastructure developers and alternative fuel providers;
  - Fleet operators, both public and private, including fleets participating in the SCAQMD Carl Moyer Program;
  - School districts seeking assistance for compressed natural gas refueling station development;

- Project teaming by multiple stakeholders, such as real property owners working in partnership with infrastructure providers or fleet operators, joint powers authorities, limited liability partnerships, etc., are eligible to participate. The MSRC does require, however, that a single prime contractor and contract signatory be designated at the time of application submission. ***Please note: except as discussed under Compression Services Tariff below, the MSRC also requires the applicant for a fueling station project to be the entity that will own the fueling equipment;***

4. **Eligible Fuels** – The following fuels are allowable under this Program:

- Compressed Natural Gas (CNG);
- Renewable Biogas (methane);
- Liquefied Natural Gas (LNG);
- Liquefied/Compressed Natural Gas (L/CNG);

5. **Maximum Total Funding Per Entity** – To ensure broad-based participation, the MSRC has established the following maximum funding parameters:

- The maximum total funding award to any public or private entity under this solicitation shall not exceed 20% of the total Available Funding. This maximum funding restriction can be waived by the MSRC in the event the MSRC does not receive meritorious applications from other bidders that meet or exceed 80% of the total available funds, or if the MSRC allocates additional funds to the program. The MSRC reserves the right to determine which projects, if any, are deemed meritorious and warrant a **Clean Transportation Funding™** award; and
- The total of the MSRC funding award cannot exceed 50% of the Total Project Cost.

6. **Signage Requirements** – Publicly accessible refueling stations that receive an award must have motorist directional signage installed in proximity to the refueling station. This includes identification signs in immediate proximity to the refueling station and directional “trailblazer” signs on major streets and arterials in proximity to the refueling station. The installation of freeway signs is not required. The cost of sign procurement, permitting, and installation may be included as a station capital cost element.

7. **Federal Tax Credits** – Entities that sell, compress and/or dispense alternative fuels may be eligible for a Federal Tax Credit. To promote the use of alternative fuel, the MSRC believes it is appropriate that any Federal Tax credit ultimately reduce the price of fuel dispensed. Therefore, commercial entities seeking MSRC funding, whose primary business is the construction of refueling stations and/or sale of fuel, must disclose how potential Federal Tax Credits are accounted for when developing station cost construction cost estimates and fuel pricing. Please refer to Attachment G.

8. **Funding Restrictions** – MSRC funds cannot be used to fund the following project elements:

- Natural gas refueling station maintenance or operations costs, including utility costs, or fuel purchase costs;
- Purchase or lease of real property.

9. **Conflict of Interest** - Address possible conflicts of interest with other clients affected by actions performed by the firm on behalf of the MSRC. Although the applicant will not be automatically disqualified by reason



of work performed for such firms, the MSRC reserves the right to consider the nature and extent of such work in evaluating the application.

**10. Certifications** – All applicants must complete and submit the following Attachment H forms as an element of their Application (unless specifically exempted below):

- Internal Revenue Service Form W-9 – Request for Taxpayer Identification Number and Certification, and Franchise Tax Board Form 590 – Withholding Exemption Certificate. If you are selected for an award, you cannot be established as a vendor without this information.
- Campaign Contributions Disclosure. This information must be provided at the time of application in accordance with California law. You may be asked for an update when awards are considered.
- MSRC Prospective Contractor Information. This information helps us to determine if any financial interests exist under the Government Code or any other State of California conflict-of-interest regulations.
- Disadvantaged Business Certification. The SCAQMD needs this information for their vendor database. IT WILL NOT BE CONSIDERED IN THE DETERMINATION OF YOUR MSRC AWARD. Governmental entities do not need to complete this form.

**11. Earliest Date for an MSRC-Funded Project to Commence** – The release date of this Program Announcement, June 2, 2017, is the earliest date work on a project can commence and be potentially eligible for MSRC Natural Gas Infrastructure Funding. Any expenditures made in anticipation of an award and prior to execution of a contract are solely at the proposer's risk. If no contract is executed, neither the MSRC nor South Coast AQMD are liable for payment of any funds expended in anticipation of a contract. Please note that in the event a contract is executed, reimbursement for any costs incurred by the proposer in anticipation of the contract is at the discretion of the MSRC and SCAQMD.

**12. Project Implementation Schedules** - Applicants are expected to provide a realistic project implementation schedule as an element of their application. In order to ensure that MSRC funds are awarded to projects which are ready to proceed, the following requirements apply:

- All stations are expected to be operational within 24 months of contract execution. If a prospective applicant does not expect completion within this time frame, they should consider awaiting future funding opportunities.
- In the event an application is awarded MSRC funds, the project implementation schedule will become an element of the contract.
- Once a proposed contract is sent to the applicant for execution, the applicant must negotiate any requested changes and sign and return the contract within six months, or contract negotiations will terminate and the award will be returned to the Discretionary Fund.
- In the event a contractor is unable to meet project milestones and requires additional time, the MSRC reserves the right to administratively authorize a one-time extension to the period of performance, not to exceed an additional one (1) year. Beyond one year, additional extensions to the contract period of performance may only be granted if, at the discretion of the MSRC, there is adequate justification and the project would provide sufficiently large benefit to offset the delay.

### 13. Additional Conditions on MSRC Funding

- MSRC funds will be distributed on a reimbursement basis only upon completion of approved project tasks and submission of all required reports and invoices.
- Recipients of MSRC Clean Transportation Funding™ must guarantee that projects implemented under this Program will remain operational and in the approved location for a period of no less than five (5) years from the date the project is fully implemented. For the purpose of refueling station construction, “fully implemented” is defined as the date the refueling station initiates fueling operations;
- Infrastructure projects funded under this Program Announcement are not eligible to receive additional funds under any other current MSRC Work Program solicitation;
- Infrastructure projects that received MSRC Clean Transportation Funding™ under a previous award are not eligible to seek additional funding for the same project;
- MSRC funds are not intended to fund staff salaries or administrative costs. Reasonable project management costs necessary to implement infrastructure projects are allowable; however, the MSRC reserves the right to reduce or delete program management costs that appear excessive;
- All projects must include a media and community outreach component. Acceptable outreach strategies may include, but are not limited to, a Grand Opening/project kickoff event, press releases, or press conference to highlight the project’s accomplishments;
- Finally, in accordance with state law, all projects awarded MSRC Clean Transportation Funding™ are subject to audit. It is highly recommended that bidders employ government acceptable standard accounting practices when administering their MSRC co-funded project.

### SECTION 3 – PROJECT ELIGIBILITY AND INCENTIVE LEVELS

**Project Eligibility** - The MSRC Natural Gas Infrastructure Program offers incentives for a range of infrastructure types, including fast-fill stations, slow or time-fill stations, and limited-fill refueling apparatus. The expansion of existing operational stations to accommodate growing throughput needs is also eligible, **except** that commercial entities whose business is the construction, operation, maintenance, or sale of fuel are not eligible to seek funding for the expansion of their own stations, as these entities have an economic interest in keeping their own stations in an operable condition with sufficient throughput capacity.

**Maintenance Facility Modifications** - In addition to refueling stations, MSRC Clean Transportation Funding™ is available for the modification of existing facilities used for vehicle maintenance and repair. Allowable facility modifications include, but are not necessarily limited to, the following:

- Installation of building methane detection sensors;
- Electrical shielding;
- Heater element explosion proofing;
- Gas evacuation and ventilation upgrades.

MSRC Clean Transportation Funding™ levels for maintenance facility modifications are capped at a maximum of 50% of the project costs, not to exceed a maximum of \$75,000 per facility.

**Technician Training** – Funding is also available to train technician(s) in the maintenance of natural gas-fueled vehicles and infrastructure. Training must be provided by an accredited educational institution. Funding is capped at a maximum of 50% of costs, not to exceed a maximum of \$15,000 per entity and a maximum of \$150,000 overall.

**Projects must use new refueling station components** - The relocation of existing natural gas refueling stations, or the reuse of components or equipment from existing stations, is prohibited. Furthermore, exclusively private-access stations are not eligible for funding under this Program Announcement—see Limited Access definition, below. Applications must identify at least one anchor fleet to use the station, and indicate the base number of vehicles committed to fuel at the station and/or the base throughput from that fleet. Applications for station upgrades must provide documentation that the proposed project will result in increased station utilization and increased fuel throughput.

**Maximum Incentive Levels** – The maximum “per facility” incentive awards under the MSRC’s Natural Gas Infrastructure Program are shown in Table 3-1. In no case shall the MSRC funding award exceed 50% of the combined cost of the facility capital equipment, site construction, signage, and reasonable project management costs or 50% of training costs, as applicable. The incentive levels also vary as a function of the type of refueling infrastructure proposed and type of entity requesting funding assistance. The following funding maximums apply for new and expansion refueling station projects, fleet vehicle maintenance facility modification projects, and technician training:

Table 3-1: Maximum “Per Facility” MSRC Funding Levels

Entity	Fuels	Limited Access	Full Access	Maintenance Facility Modifications	Technician Training	Renewable Natural Gas
Private	Single Fuel	\$100,000	\$150,000	\$75,000	\$15,000	\$100,000
	L/CNG	\$150,000	\$200,000	\$75,000	\$15,000	
Public	Single Fuel	\$175,000	\$225,000	\$75,000	\$15,000	\$100,000
	L/CNG	\$225,000	\$275,000	\$75,000	\$15,000	

For purposes of this Program Announcement, the following definitions apply:

- **Private Entity** – An applicant which is not a Public Entity as defined below.
- **Public Entity** – A government agency of any level, including but not limited to: municipal, county, State, Federal, special districts, and school districts.
- **Full Access** – A “Full Access” station is:
  - Open 24 hours per day, 7 days per week to any user;
  - Equipped with a universal card reader system which accepts Visa, MasterCard, and/or American Express, at a minimum; and
  - Has capacity to dispense at least 3 gasoline gallon equivalents (GGE) per minute.
- **Limited Access** – A Limited Access station does not meet one or more of the Full Public Access criteria above. However, the station owner must attest to their willingness to make arrangements for at least one other fleet to use the station, if approached by an interested fleet. The “other fleet” must be a

separate legal entity from the station owner. The owner of a Limited Access station may place reasonable restrictions on the “other fleet’s” hours of access, etc.

- **L/CNG** – Station offers both CNG and LNG fuels.
- **Technician** – An individual specializing in the maintenance of vehicles and/or fueling equipment, employed or otherwise sponsored by an entity which owns or maintains, or will soon own/maintain, natural-gas fueled vehicles or infrastructure.

**Renewable Natural Gas** – Stations that utilize natural gas produced from renewable sources (biogas) are eligible to receive an additional \$100,000 incentive. ***To qualify for this additional incentive, the facility must use greater than 50% renewable natural gas for five years following commencement of operations, either by producing it on site or through the purchase of credits for biogas produced elsewhere.*** Applications for expansion of an existing station, which already uses greater than 50% renewable natural gas, are not eligible for the additional incentive. Documentation of an ongoing biogas source will be a component of required annual reporting.

**Compression Services Tariff** - The Southern California Gas Company Compression Services Tariff (CST) is an optional utility service offered to non-residential SoCalGas customers that allows SoCalGas to procure, construct, own, operate and maintain compression equipment on customer premises. SoCalGas customers taking service under CST can be eligible to receive a funding incentive on the compression equipment, in an amount not to exceed 25% of the CST pricing and not to exceed five years’ duration. CNG fueling dispensers (not integrated with a gas compressor/skid package), card readers, and other retailing/dispensing equipment which will be owned by applicant can still receive an incentive up to 50% of the combined cost of the capital equipment, site construction, signage, and reasonable project management costs.

Project applications that do not reasonably fit within the Eligible Project Categories outlined above will not be approved and will not be eligible to receive MSRC Clean Transportation Funding™. The MSRC retains sole discretion when determining project eligibility.

#### **SECTION 4 - SCHEDULE OF EVENTS**

The Natural Gas Infrastructure Program will be conducted in accordance with the timeline shown in Table 4-1, below. Project applications may be submitted at any time during the period commencing May 5, 2017 and ending June 29, 2018. *Please note that applications must be received no later than 11:59 p.m. on June 29, 2018. All applications must be submitted electronically through the MSRC Clean Transportation Funding Website. Late applications will not be evaluated and will not be eligible for MSRC funding.*

Table 4-1 - Key Natural Gas Infrastructure Program Dates

Program Event	Date
Program Announcement Release	June 2, 2017
Application Submittal Period	June 2, 2017 – June 29, 2018
Latest Date/Time for Application Submittal	June 29, 2018 @ 11:59 p.m.
Application Evaluation & Award Consideration	First-come, first-served (geographic funding minimums apply)

## SECTION 5 - APPLICATION PREPARATION & ELECTRONIC SUBMITTAL INSTRUCTIONS

A Project Application must be completed and electronically submitted under this Program. As stated in the Introduction, only applications deemed complete will be evaluated and considered for a funding award. Applications must be prepared and submitted in accordance with the instructions outlined below.

1. **Application Preparation** – The following information must be included in all Applications seeking MSRC Clean Transportation Funding™ under the Natural Gas Infrastructure Program:

- a) **Cover letter** - Transmittal of the Application must be accompanied by a cover letter. The letter should also provide the name, telephone and fax numbers, and e-mail address of the contact person(s) for technical and contractual matters, and be signed by the person(s) authorized to contractually bind the applying entity.

For joint Applications, the Proposer must include a statement confirming authorization to act on behalf of the other co-Proposers. The Proposer must include a letter of support, including contact name and telephone/fax number, from all proposing entities of a joint Application.

- b) **Attachments A-H** - Applications must include the following completed Attachments, including all required supporting documentation as requested. Application Templates and Instructions are included in Section 8 of this Request for Proposals; see page 13:

- Attachment A: Proposer Information
- Attachment B: Project Description & Technical Specifications
- Attachment C: Project Cost Breakdown
- Attachment D: Project Implementation Schedule
- Attachment E: Memorandum of Understanding/Memorandum of Agreement
- Attachment F: Utilization Estimates/Letters of Commitment
- Attachment G: Federal Tax Credit Accounting
- Attachment H: Certifications (W-9, 590, DBE, Campaign Contribution Disclosure, MSRC Prospective Contractor)

## 2. Electronic application submittal process

In an effort to reduce the need to photocopy, package, and physically submit paper applications, the 2017 Natural Gas Infrastructure Program requires that applications be submitted electronically in PDF format using the MSRC Website. We believe this benefits the applicant, the MSRC staff, and the environment.

The application that will be submitted as a **PDF document** is comprised of Nine (9) primary sections – these correspond to the Cover Letter and application Attachments A-H as described in the preceding section.

Thus, a complete application will be comprised of the following nine elements:

1. Signed Cover Letter;
2. Attachment A: Proposer Information
3. Attachment B: Project Description & Technical Specifications
4. Attachment C: Project Cost Breakdown
5. Attachment D: Project Implementation Schedule
6. Attachment E: Memorandum of Understanding/Memorandum of Agreement
7. Attachment F: Utilization Estimates/Letters of Commitment
8. Attachment G: Federal Tax Credit Accounting
9. Attachment H: Certifications
  - a. W-9 Form
  - b. Form 590
  - c. Disadvantaged Business Certification Form
  - d. Campaign Contribution Disclosure Form
  - e. MSRC Prospective Contractor

These nine sections, including Attachment H certifications, are to be compiled into a **single PDF document** for submittal to the MSRC Clean Transportation Funding Website. ***Please note that ONLY PDF format can be accepted. Microsoft Word documents cannot be accepted by the MSRC Website.*** Applicants will need to register on the MSRC Clean Transportation Funding website.

***Please note that the latest date and time to submit an application is June 29, 2018 at 11:59 pm!***

3. **Addenda** – The Mobile Source Air Pollution Reduction Review Committee may modify the Program Announcement and/or issue supplementary information or guidelines relating to the Program Announcement during the Application preparation and acceptance period of June 2, 2017 to June 29, 2018. Amendments will be posted on the MSRC website at [www.CleanTransportationFunding.org](http://www.CleanTransportationFunding.org).
4. **Application Modifications** - Once submitted, Applications cannot be altered without the prior written consent of the Mobile Source Air Pollution Reduction Review Committee.

5. **Certificates of Insurance** - Proposers are required to provide a statement that upon notification of award, a certificate(s) of insurance naming the SCAQMD as an additional insured will be provided within forty-five (45) days. Entities that are self-insured are required to provide a statement to that effect in their application.

## SECTION 6 - IF YOU NEED HELP...

This Program Announcement can be obtained by accessing the MSRC web site at [www.CleanTransportationFunding.org](http://www.CleanTransportationFunding.org). MSRC staff members are available to answer questions during the Application acceptance period. In order to help expedite assistance, please direct your inquiries to the applicable staff person, as follows:

- For **General and Administrative Assistance**, please contact:  
Cynthia Ravenstein  
MSRC Contracts Administrator  
Phone: 909-396-3269  
E-mail: [Cynthia@cleantransportationfunding.org](mailto:Cynthia@cleantransportationfunding.org)
- For **Technical Assistance**, please contact:  
Ray Gorski  
MSRC Technical Advisor  
Phone: 909-396-2479  
E-mail: [Ray@cleantransportationfunding.org](mailto:Ray@cleantransportationfunding.org)
- For **Contractual Assistance**, please contact:  
Dean Hughbanks  
SCAQMD Procurement Manager  
Phone: 909-396-2808  
E-mail: [dhughbanks@aqmd.gov](mailto:dhughbanks@aqmd.gov)

## SECTION 7- APPLICATION EVALUATION AND APPROVAL PROCESS

Applications will be evaluated as they are received to determine compliance with all mandatory requirements. Applications that do not comply with the stipulated requirements will be returned to the project applicant for revision and resubmission. Any returned applications will lose their original submittal date and, if resubmitted, will be issued a new date upon receipt by the MSRC for purposes of disbursing funds on a first-come, first-served basis.

If an application is for a Public Works project as defined by State of California Labor Code Section 1720, Applicant may be required to include Contractor Registration Number in Attachment A. Application will be deemed as non-responsive and applicant may be disqualified if Contractor Registration Number is not included in Attachment A, as applicable. Applicant is alerted to changes to California Prevailing Wage compliance requirements as defined in Senate Bill 854 (Stat. 2014, Chapter 28).

Applications deemed compliant will be forwarded to the MSRC Technical Advisory Committee (MSRC-TAC) for review and concurrence with staff's recommendation. Applications recommended for approval by the MSRC-

TAC will be forwarded to the MSRC for approval (applicants may be asked to provide an updated Campaign Contributions Disclosure form at this time). Applications recommended for funding by the MSRC will be forwarded to the SCAQMD Governing Board for final approval.

Upon receipt of Governing Board approval, the MSRC staff will prepare a contract for execution by the applicant. The time period from SCAQMD Governing Board approval to contract execution is anticipated to be approximately one hundred twenty (120) days.



## SECTION 8 - PROPOSAL ATTACHMENTS – PA2017-07

### Attachment A: PROPOSAL SUMMARY INFORMATION

A. Please provide the following Proposer information in the space provided:

Business Name	
Division of:	
Subsidiary of:	
Website Address	
Type of Business <i>Check One:</i>	<input type="checkbox"/> Individual <input type="checkbox"/> DBA, Name _____, County Filed in _____ <input type="checkbox"/> Corporation, ID No. _____ <input type="checkbox"/> LLC/LLP, ID No. _____ <input type="checkbox"/> Other _____
Contractor Registration Number (required for Public Works projects)	

Address			
City/Town			
State/Province		Zip	
Phone	(     )     -     Ext	Fax	(     )     -
Contact		Title	
E-mail Address			
Payment Name if Different			

B. Funding Request Summary:

MSRC Clean Transportation Funding™ Requested:	\$ _____
Existing or Anticipated SCAQMD Funding Applied to Project:	\$ _____
Other Co-Funding Applied to Project:	\$ _____
<b>Total Project Cost:</b>	<b>\$ _____</b>

## Attachment B: PROJECT DESCRIPTION & TECHNICAL SPECIFICATIONS

Please provide the following information regarding the proposed refueling facility:

1. Proposed Location – Please provide the street address of the proposed facility:
2. Project Type (please check the appropriate box(s)):
  - ☐ New Station
  - ☐ Expansion of Existing, Operational Station
  - ☐ Modification of Existing Vehicle Maintenance Facility
3. The proposed new/upgraded refueling station will be (please check the appropriate box):
  - ☐ Full Public Access (open to any user 24 hours per day, 7 days per week; equipped with universal card reader, and minimum dispensing capacity of 3 GGE per minute)
  - ☐ Limited Access (does not meet criteria of Full Public Access. Applicant attests their willingness to make the station available to at least one other fleet)
4. Fuel Type(s) – please check the appropriate box specifying the fuel(s) proposed for the station:
  - ☐ CNG
  - ☐ LNG
  - ☐ L/CNG
  - ☐ > 50% Renewable Natural Gas (if checked, applicant will need to provide documentation of biogas source prior to contract execution)
5. Site Owner – Owner of the real property upon which the station will be constructed:
6. Station Operator – Entity that will operate and maintain the refueling facility:
7. Infrastructure Vendor/Installation Contractor – Name of equipment vendor(s) and installation contractor(s), if known:
8. Fuel Provider – Name of fuel vendor:
9. Refueling Infrastructure Description/Technical Specification. Please respond to a., b., c. and/or d. below, as appropriate:
  - a. New Refueling Facility - Description must include, at a minimum:
    - i. Site plan illustrating the proposed station's location on the property, including at a minimum the adjacent streets, entrance and exit locations, locations of dispenser islands, canopies, fuel storage tanks, compressors, walls and/or spill containment areas as appropriate;
    - ii. Technical Specification, including a complete listing of all station equipment, hardware, and components, including component manufacturer and model number if known. In addition, the

- specification must provide minimum fuel storage capacities, compression and dispenser ratings, as well as number, make, and model of dispensers and card readers, etc. if known;
- iii. Description of other project elements, including site amenities such as private access/public access islands, card reader payment options, overhead canopies, signage, traffic circulation plan, landscaping, fencing, security lighting, etc.
- b. Expansion of Existing Refueling Facility – description must include, at a minimum:
- i. a description of the site location, existing fuel type and storage capacity, number of existing fuel dispensers, level of accessibility (private access, limited fleet access, etc.), current station utilization, including average monthly fuel throughput, numbers and types of vehicles that typically utilize station, etc.
  - ii. Please discuss the proposed station expansion and/or upgrades: Provide a detailed description of the proposed upgrade and/or expansion project. Include a technical description of the station in its modified or expanded configuration. Discuss, at a minimum, how the proposed upgrades/expansion will impact the station's ability to remain operational and accessible, the strategic importance of the expanded and/or upgraded station, and the number, types, and sizes of vehicles the station will accommodate in its expanded and/or upgraded configuration.
  - iii. Please describe the funding requirements for implementing the proposed refueling station expansion and/or upgrades, including the need for MSRC funding assistance: Discuss co-funding commitments offered by the Proposer or other station stakeholders. Describe other funding sources currently being pursued to support station upgrades/expansion. Discuss any unique financial constraints that impact the Proposer's ability to perform station upgrades and/or expansion.
- c. Maintenance Facility Modifications – Please provide a technical description of the proposed facility modifications, including the facility location, a detailed description of the facility and its use, a detailed listing of equipment, hardware, and components to be procured, including equipment vendor and model if known. In addition, please provide the number and types of vehicles the facility will accommodate in its modified configuration.
- d. Technician Training – Please provide the number of employees proposed to be trained, and describe the accredited program proposed for their training.

**Attachment C: COST BREAKDOWN:** Please provide a detailed cost breakdown of the proposed project. Please note that MSRC Clean Transportation Funding™ is intended to help offset the cost of station capital equipment, site construction, signage, and reasonable project management costs, and cannot be applied to real property purchases, operations and maintenance costs, or labor and administrative costs deemed excessive. The MSRC reserves the right to exclude cost elements deemed unallowable, as well as award funding in an amount less than the requested amount.

Site Improvements, including fencing, driveways, curbing, landscaping, lighting, other construction, etc. Please itemize site improvement costs below:	
	\$
	\$
	\$
	\$
<b>Refueling Station Capital Equipment</b>	
Compressors	\$
Dryers	\$
Storage Vessels	\$
Dispensers	\$
Card Readers	\$
Signage (mandatory – see Section 2 paragraph 5)	\$
Other (Canopy, etc. Please specify)	\$
Shipping & Delivery Charges	\$
Installation	\$
Taxes	\$
Project Management	\$
<b>Facility Modifications to Existing Maintenance Facilities</b>	
	\$
<b>Technician Training</b>	
	\$
<b>Total Project Cost Estimate</b>	\$
<b>MSRC FUNDING REQUEST</b>	\$

Please note that the total of the MSRC funding award cannot exceed 50% of the Total Project Cost up to the maximum funding levels shown in Table 3-1.

## Attachment D: PROJECT IMPLEMENTATION SCHEDULE

Please provide, either in the space outlined below or separate attached sheet, a Milestone Schedule for your proposed natural gas station project. Please note that this information will become an element of any contract resulting from a potential award of MSRC Clean Transportation Funding™.

Please endeavor to make your Milestone Schedule as accurate as possible. Please note that extensions to the project period of performance are not guaranteed. Attach additional sheets as necessary.

<i>PROJECT MILESTONE</i>	<i>START DATE</i>	<i>COMPLETION</i>
<i>Example: Task 1 – Order equipment</i>	<i>Authority to Proceed (ATP) + one month</i>	<i>ATP + 3 months</i>

**Attachment E: MEMORANDUM OF UNDERSTANDING BETWEEN CONTRACTOR AND HOST SITE**

For projects seeking MSRC **Clean Transportation Funding™** for construction of natural gas refueling stations, a fully executed Memorandum of Understanding (MOU) or Memorandum of Agreement (MOA) must be submitted as an element of the application package. **Please note that an MOU/MOA is NOT REQUIRED if the project applicant is the Site or Facility Owner.**

The MOU/MOA must be provided at the time of Application submittal and must contain the following essential elements, at a minimum:

- The parties to the MOU/MOA, including the fuel provider and/or facility developer and the site owner;
- The term of the MOU/MOA;
- The specific location of the refueling station to be constructed;
- Anticipated date of infrastructure construction;
- Anticipated date of infrastructure completion and start of operation;
- Executed signatures by individuals authorized on behalf of the parties to the MOU/MOA.

## **Attachment F: STATION UTILIZATION ESTIMATES**

Applicants are required to demonstrate that the proposed station will have an adequate usage level to ensure the station remains operational for the required five-year period, as follows:

- Identify at least one anchor fleet which has committed to use the station on a regular basis. Please provide contact information for the anchor fleet. Please note that MSRC members or staff may contact any and all references provided in relation to station utilization commitment.
- Provide an estimate of the estimated annual station fuel throughput, and/or describe the number and types of natural gas vehicles expected to utilize the station immediately upon completion.
- Please attach letters of commitment between the applicant and fleets or other station users that commit to use the natural gas station for vehicle refueling.

Please be aware that any contract resulting from an award of MSRC **Clean Transportation Funding™** will include fuel throughput obligations, based on the estimates in the application, as an enforceable element of the contract. Therefore, it is strongly recommended that Proposers present station utilization estimates that are as accurate as possible and based on firm station utilization commitments!

**Attachment G: FEDERAL TAX CREDIT ACCOUNTING**

*Please note that this Attachment only pertains to commercial business entities. Public agencies are not required to complete Attachment G.*

The MSRC is aware that Federal Tax Credits may be available to help defray the cost of natural gas station construction and fuel purchase. It is important to the MSRC that stations funded using public money demonstrate that the benefits of these funds are enjoyed broadly, especially as it pertains to the price of fuel paid by the end user.

Thus, in the event that the tax credits are extended, the MSRC requires that prior to any award of **Clean Transportation Funding™** to commercial business applicants whose primary business is the construction of refueling stations and/or sale of alternative fuel, the applicant must disclose in writing if they:

- a) Are or are not eligible to receive Federal Tax Credit(s), and if they are;
- b) How the Tax Credit(s) is factored into the cost of station construction and the pricing of fuel dispensed at the proposed refueling station.

This discussion should be labeled “Attachment G” and be included in the Application package at the time of submittal. Please note that Applications submitted by affected entities that fail to include Attachment G will be deemed incomplete and returned for corrective action.



# Attachment H: CERTIFICATIONS

<p><b>Form W-9</b> (Rev. December 2014) Department of the Treasury Internal Revenue Service</p>	<p><b>Request for Taxpayer Identification Number and Certification</b></p>	<p><b>Give Form to the requester. Do not send to the IRS.</b></p>
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Print or type See Specific Instructions on page 2.	<b>1</b> Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.		
	<b>2</b> Business name/disregarded entity name, if different from above		
	<b>3</b> Check appropriate box for federal tax classification; check only <b>one</b> of the following seven boxes: <input type="checkbox"/> Individual/sole proprietor or single-member LLC <input type="checkbox"/> C Corporation <input type="checkbox"/> S Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Trust/estate <input type="checkbox"/> Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ▶ _____ <b>Note.</b> For a single-member LLC that is disregarded, do not check LLC; check the appropriate box in the line above for the tax classification of the single-member owner. <input type="checkbox"/> Other (see instructions) ▶ _____		<b>4</b> Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3): Exempt payee code (if any) _____ Exemption from FATCA reporting code (if any) _____ <i>(Applies to accounts maintained outside the U.S.)</i>
	<b>5</b> Address (number, street, and apt. or suite no.)	Requester's name and address (optional)	
	<b>6</b> City, state, and ZIP code		
<b>7</b> List account number(s) here (optional)			

<b>Part I Taxpayer Identification Number (TIN)</b>	
Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see <i>How to get a TIN</i> on page 3.	
<b>Social security number</b> <div style="border: 1px solid black; width: 100px; height: 20px; margin: 2px;"></div>	<b>OR</b> <b>Employer identification number</b> <div style="border: 1px solid black; width: 150px; height: 20px; margin: 2px;"></div>
<b>Note.</b> If the account is in more than one name, see the instructions for line 1 and the chart on page 4 for guidelines on whose number to enter.	

<b>Part II Certification</b>	
Under penalties of perjury, I certify that:	
1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and	
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and	
3. I am a U.S. citizen or other U.S. person (defined below); and	
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.	
<b>Certification instructions.</b> You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 3.	
<b>Sign Here</b>	Signature of U.S. person ▶ _____ Date ▶ _____

<b>General Instructions</b> Section references are to the Internal Revenue Code unless otherwise noted. <b>Future developments.</b> Information about developments affecting Form W-9 (such as legislation enacted after we release it) is at <a href="http://www.irs.gov/fw9">www.irs.gov/fw9</a> . <b>Purpose of Form</b> An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following: <ul style="list-style-type: none"> <li>• Form 1099-INT (interest earned or paid)</li> <li>• Form 1099-DIV (dividends, including those from stocks or mutual funds)</li> <li>• Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)</li> <li>• Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)</li> <li>• Form 1099-S (proceeds from real estate transactions)</li> <li>• Form 1099-K (merchant card and third party network transactions)</li> </ul>	<ul style="list-style-type: none"> <li>• Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)</li> <li>• Form 1099-C (canceled debt)</li> <li>• Form 1099-A (acquisition or abandonment of secured property)</li> </ul> Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN. If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See <i>What is backup withholding?</i> on page 2. By signing the filled-out form, you: <ol style="list-style-type: none"> <li>1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),</li> <li>2. Certify that you are not subject to backup withholding, or</li> <li>3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and</li> <li>4. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See <i>What is FATCA reporting?</i> on page 2 for further information.</li> </ol>
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**Note.** If you are a U.S. person and a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

**Definition of a U.S. person.** For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien;
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States;
- An estate (other than a foreign estate); or
- A domestic trust (as defined in Regulations section 301.7701-7).

**Special rules for partnerships.** Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax under section 1446 on any foreign partners' share of effectively connected taxable income from such business. Further, in certain cases where a Form W-9 has not been received, the rules under section 1446 require a partnership to presume that a partner is a foreign person, and pay the section 1446 withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid section 1446 withholding on your share of partnership income.

In the cases below, the following person must give Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States:

- In the case of a disregarded entity with a U.S. owner, the U.S. owner of the disregarded entity and not the entity;
- In the case of a grantor trust with a U.S. grantor or other U.S. owner, generally, the U.S. grantor or other U.S. owner of the grantor trust and not the trust; and
- In the case of a U.S. trust (other than a grantor trust), the U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

**Foreign person.** If you are a foreign person or the U.S. branch of a foreign bank that has elected to be treated as a U.S. person, do not use Form W-9. Instead, use the appropriate Form W-8 or Form 8233 (see Publication 515, Withholding of Tax on Nonresident Aliens and Foreign Entities).

**Nonresident alien who becomes a resident alien.** Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items:

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.
2. The treaty article addressing the income.
3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.
4. The type and amount of income that qualifies for the exemption from tax.
5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

**Example.** Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity, give the requester the appropriate completed Form W-8 or Form 8233.

## Backup Withholding

**What is backup withholding?** Persons making certain payments to you must under certain conditions withhold and pay to the IRS 28% of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, payments made in settlement of payment card and third party network transactions, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

**Payments you receive will be subject to backup withholding if:**

1. You do not furnish your TIN to the requester,
2. You do not certify your TIN when required (see the Part II instructions on page 3 for details),

3. The IRS tells the requester that you furnished an incorrect TIN,
4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or
5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See *Exempt payee code* on page 3 and the separate Instructions for the Requester of Form W-9 for more information.

Also see *Special rules for partnerships* above.

## What is FATCA reporting?

The Foreign Account Tax Compliance Act (FATCA) requires a participating foreign financial institution to report all United States account holders that are specified United States persons. Certain payees are exempt from FATCA reporting. See *Exemption from FATCA reporting code* on page 3 and the Instructions for the Requester of Form W-9 for more information.

## Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you no longer are tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account; for example, if the grantor of a grantor trust dies.

## Penalties

**Failure to furnish TIN.** If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

**Civil penalty for false information with respect to withholding.** If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

**Criminal penalty for falsifying information.** Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

**Misuse of TINs.** If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

## Specific Instructions

### Line 1

You must enter one of the following on this line; **do not** leave this line blank. The name should match the name on your tax return.

If this Form W-9 is for a joint account, list first, and then circle, the name of the person or entity whose number you entered in Part I of Form W-9.

a. **Individual.** Generally, enter the name shown on your tax return. If you have changed your last name without informing the Social Security Administration (SSA) of the name change, enter your first name, the last name as shown on your social security card, and your new last name.

**Note. ITIN applicant:** Enter your individual name as it was entered on your Form W-7 application, line 1a. This should also be the same as the name you entered on the Form 1040/1040A/1040EZ you filed with your application.

b. **Sole proprietor or single-member LLC.** Enter your individual name as shown on your 1040/1040A/1040EZ on line 1. You may enter your business, trade, or "doing business as" (DBA) name on line 2.

c. **Partnership, LLC that is not a single-member LLC, C Corporation, or S Corporation.** Enter the entity's name as shown on the entity's tax return on line 1 and any business, trade, or DBA name on line 2.

d. **Other entities.** Enter your name as shown on required U.S. federal tax documents on line 1. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on line 2.

e. **Disregarded entity.** For U.S. federal tax purposes, an entity that is disregarded as an entity separate from its owner is treated as a "disregarded entity." See Regulations section 301.7701-2(c)(2)(iii). Enter the owner's name on line 1. The name of the entity entered on line 1 should never be a disregarded entity. The name on line 1 should be the name shown on the income tax return on which the income should be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a single owner that is a U.S. person, the U.S. owner's name is required to be provided on line 1. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity's name on line 2, "Business name/disregarded entity name." If the owner of the disregarded entity is a foreign person, the owner must complete an appropriate Form W-8 instead of a Form W-9. This is the case even if the foreign person has a U.S. TIN.



**Line 2**

If you have a business name, trade name, DBA name, or disregarded entity name, you may enter it on line 2.

**Line 3**

Check the appropriate box in line 3 for the U.S. federal tax classification of the person whose name is entered on line 1. Check only one box in line 3.

**Limited Liability Company (LLC).** If the name on line 1 is an LLC treated as a partnership for U.S. federal tax purposes, check the "Limited Liability Company" box and enter "P" in the space provided. If the LLC has filed Form 8832 or 2553 to be taxed as a corporation, check the "Limited Liability Company" box and in the space provided enter "C" for C corporation or "S" for S corporation. If it is a single-member LLC that is a disregarded entity, do not check the "Limited Liability Company" box; instead check the first box in line 3 "Individual/sole proprietor or single-member LLC."

**Line 4, Exemptions**

If you are exempt from backup withholding and/or FATCA reporting, enter in the appropriate space in line 4 any code(s) that may apply to you.

**Exempt payee code.**

- Generally, individuals (including sole proprietors) are not exempt from backup withholding.
- Except as provided below, corporations are exempt from backup withholding for certain payments, including interest and dividends.
- Corporations are not exempt from backup withholding for payments made in settlement of payment card or third party network transactions.
- Corporations are not exempt from backup withholding with respect to attorneys' fees or gross proceeds paid to attorneys, and corporations that provide medical or health care services are not exempt with respect to payments reportable on Form 1099-MISC.

The following codes identify payees that are exempt from backup withholding. Enter the appropriate code in the space in line 4.

- 1—An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2)
- 2—The United States or any of its agencies or instrumentalities
- 3—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities
- 4—A foreign government or any of its political subdivisions, agencies, or instrumentalities
- 5—A corporation
- 6—A dealer in securities or commodities required to register in the United States, the District of Columbia, or a U.S. commonwealth or possession
- 7—A futures commission merchant registered with the Commodity Futures Trading Commission
- 8—A real estate investment trust
- 9—An entity registered at all times during the tax year under the Investment Company Act of 1940
- 10—A common trust fund operated by a bank under section 584(a)
- 11—A financial institution
- 12—A middleman known in the investment community as a nominee or custodian
- 13—A trust exempt from tax under section 664 or described in section 4947

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 13.

IF the payment is for . . .	THEN the payment is exempt for . . .
Interest and dividend payments	All exempt payees except for 7
Broker transactions	Exempt payees 1 through 4 and 6 through 11 and all C corporations. S corporations must not enter an exempt payee code because they are exempt only for sales of noncovered securities acquired prior to 2012.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 4
Payments over \$600 required to be reported and direct sales over \$5,000 <sup>1</sup>	Generally, exempt payees 1 through 5 <sup>2</sup>
Payments made in settlement of payment card or third party network transactions	Exempt payees 1 through 4

<sup>1</sup> See Form 1099-MISC, Miscellaneous Income, and its instructions.

<sup>2</sup> However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney reportable under section 6045(f), and payments for services paid by a federal executive agency.

**Exemption from FATCA reporting code.** The following codes identify payees that are exempt from reporting under FATCA. These codes apply to persons submitting this form for accounts maintained outside of the United States by certain foreign financial institutions. Therefore, if you are only submitting this form for an account you hold in the United States, you may leave this field blank. Consult with the person requesting this form if you are uncertain if the financial institution is subject to these requirements. A requester may indicate that a code is not required by providing you with a Form W-9 with "Not Applicable" (or any similar indication) written or printed on the line for a FATCA exemption code.

A—An organization exempt from tax under section 501(a) or any individual retirement plan as defined in section 7701(a)(37)

B—The United States or any of its agencies or instrumentalities

C—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities

D—A corporation the stock of which is regularly traded on one or more established securities markets, as described in Regulations section 1.1472-1(c)(1)(i)

E—A corporation that is a member of the same expanded affiliated group as a corporation described in Regulations section 1.1472-1(c)(1)(i)

F—A dealer in securities, commodities, or derivative financial instruments (including notional principal contracts, futures, forwards, and options) that is registered as such under the laws of the United States or any state

G—A real estate investment trust

H—A regulated investment company as defined in section 851 or an entity registered at all times during the tax year under the Investment Company Act of 1940

I—A common trust fund as defined in section 584(a)

J—A bank as defined in section 581

K—A broker

L—A trust exempt from tax under section 664 or described in section 4947(a)(1)

M—A tax exempt trust under a section 403(b) plan or section 457(g) plan

**Note.** You may wish to consult with the financial institution requesting this form to determine whether the FATCA code and/or exempt payee code should be completed.

**Line 5**

Enter your address (number, street, and apartment or suite number). This is where the requester of this Form W-9 will mail your information returns.

**Line 6**

Enter your city, state, and ZIP code.

**Part I. Taxpayer Identification Number (TIN)**

**Enter your TIN in the appropriate box.** If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN. However, the IRS prefers that you use your SSN.

If you are a single-member LLC that is disregarded as an entity separate from its owner (see *Limited Liability Company (LLC)* on this page), enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

**Note.** See the chart on page 4 for further clarification of name and TIN combinations.

**How to get a TIN.** If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local SSA office or get this form online at [www.ssa.gov](http://www.ssa.gov). You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at [www.irs.gov/businesses](http://www.irs.gov/businesses) and clicking on Employer Identification Number (EIN) under Starting a Business. You can get Forms W-7 and SS-4 from the IRS by visiting [IRS.gov](http://IRS.gov) or by calling 1-800-TAX-FORM (1-800-829-3676).

If you are asked to complete Form W-9 but do not have a TIN, apply for a TIN and write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

**Note.** Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

**Caution:** A disregarded U.S. entity that has a foreign owner must use the appropriate Form W-8.

**Part II. Certification**

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if items 1, 4, or 5 below indicate otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on line 1 must sign. Exempt payees, see *Exempt payee code* earlier.

**Signature requirements.** Complete the certification as indicated in items 1 through 5 below.

**1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983.** You must give your correct TIN, but you do not have to sign the certification.

**2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983.** You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

**3. Real estate transactions.** You must sign the certification. You may cross out item 2 of the certification.

**4. Other payments.** You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments made in settlement of payment card and third party network transactions, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

**5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions.** You must give your correct TIN, but you do not have to sign the certification.

**What Name and Number To Give the Requester**

For this type of account:	Give name and SSN or:
1. Individual	The individual
2. Two or more individuals (joint account)	The actual owner of the account or, if combined funds, the first individual on the account <sup>1</sup>
3. Custodian account of a minor (Uniform Gift to Minors Act)	The minor <sup>2</sup>
4. a. The usual revocable savings trust (grantor is also trustee) b. So-called trust account that is not a legal or valid trust under state law	The grantor-trustee <sup>1</sup>  The actual owner <sup>1</sup>
5. Sole proprietorship or disregarded entity owned by an individual	The owner <sup>2</sup>
6. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulations section 1.671-4(b)(2)(i)(A))	The grantor <sup>2</sup>
For this type of account:	Give name and EIN or:
7. Disregarded entity not owned by an individual	The owner
8. A valid trust, estate, or pension trust	Legal entity <sup>1</sup>
9. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
10. Association, club, religious, charitable, educational, or other tax-exempt organization	The organization
11. Partnership or multi-member LLC	The partnership
12. A broker or registered nominee	The broker or nominee
13. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
14. Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulations section 1.671-4(b)(2)(i)(B))	The trust

<sup>1</sup> List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

<sup>2</sup> Circle the minor's name and furnish the minor's SSN.

<sup>3</sup> You must show your individual name and you may also enter your business or DBA name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

<sup>4</sup> List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships* on page 2.

**Note.** Grantor also must provide a Form W-9 to trustee of trust.

**Note.** If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

**Secure Your Tax Records from Identity Theft**

Identity theft occurs when someone uses your personal information such as your name, SSN, or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN.
- Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity or credit report, contact the IRS Identity Theft Hotline at 1-800-908-4490 or submit Form 14039.

For more information, see Publication 4535, Identity Theft Prevention and Victim Assistance.

Victims of identity theft who are experiencing economic harm or a system problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

**Protect yourself from suspicious emails or phishing schemes.** Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to [phishing@irs.gov](mailto:phishing@irs.gov). You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration (TIGTA) at 1-800-368-4484. You can forward suspicious emails to the Federal Trade Commission at: [spam@uce.gov](mailto:spam@uce.gov) or contact them at [www.ftc.gov/idtheft](http://www.ftc.gov/idtheft) or 1-877-IDTHEFT (1-877-438-4338).

Visit [IRS.gov](http://IRS.gov) to learn more about identity theft and how to reduce your risk.

**Privacy Act Notice**

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. commonwealths and possessions for use in administering their laws. The information also may be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payers must generally withhold a percentage of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to the payer. Certain penalties may also apply for providing false or fraudulent information.



TAXABLE YEAR

CALIFORNIA FORM

# 2017 Withholding Exemption Certificate

590

The payee completes this form and submits it to the withholding agent. The withholding agent keeps this form with their records.

## Withholding Agent Information

Name

## Payee Information

Name

☐ SSN or ITIN ☐ FEIN ☐ CA Corp. no. ☐ CA SOS file no.

Address (apt./sta., room, PO box, or PMS no.)

City (if you have a foreign address, see instructions.)

State ZIP code

## Exemption Reason

Check only one box.

By checking the appropriate box below, the payee certifies the reason for the exemption from the California income tax withholding requirements on payment(s) made to the entity or individual.

### ☐ Individuals — Certification of Residency:

I am a resident of California and I reside at the address shown above. If I become a nonresident at any time, I will promptly notify the withholding agent. See instructions for General Information D, Definitions.

### ☐ Corporations:

The corporation has a permanent place of business in California at the address shown above or is qualified through the California Secretary of State (SOS) to do business in California. The corporation will file a California tax return. If the corporation ceases to have a permanent place of business in California or ceases to do any of the above, I will promptly notify the withholding agent. See instructions for General Information D, Definitions.

### ☐ Partnerships or Limited Liability Companies (LLCs):

The partnership or LLC has a permanent place of business in California at the address shown above or is registered with the California SOS, and is subject to the laws of California. The partnership or LLC will file a California tax return. If the partnership or LLC ceases to do any of the above, I will promptly inform the withholding agent. For withholding purposes, a limited liability partnership (LLP) is treated like any other partnership.

### ☐ Tax-Exempt Entities:

The entity is exempt from tax under California Revenue and Taxation Code (R&TC) Section 23701 (insert letter) or Internal Revenue Code Section 501(c) (insert number). If this entity ceases to be exempt from tax, I will promptly notify the withholding agent. Individuals cannot be tax-exempt entities.

### ☐ Insurance Companies, Individual Retirement Arrangements (IRAs), or Qualified Pension/Profit-Sharing Plans:

The entity is an insurance company, IRA, or a federally qualified pension or profit-sharing plan.

### ☐ California Trusts:

At least one trustee and one noncontingent beneficiary of the above-named trust is a California resident. The trust will file a California fiduciary tax return. If the trustee or noncontingent beneficiary becomes a nonresident at any time, I will promptly notify the withholding agent.

### ☐ Estates — Certification of Residency of Deceased Person:

I am the executor of the above-named person's estate or trust. The decedent was a California resident at the time of death. The estate will file a California fiduciary tax return.

### ☐ Nonmilitary Spouse of a Military Servicemember:

I am a nonmilitary spouse of a military servicemember and I meet the Military Spouse Residency Relief Act (MSRRA) requirements. See instructions for General Information E, MSRRA.

**CERTIFICATE OF PAYEE:** Payee must complete and sign below.

To learn about your privacy rights, how we may use your information, and the consequences for not providing the requested information, go to [ftb.ca.gov](http://ftb.ca.gov) and search for **privacy notice**. To request this notice by mail, call 800.852.5711.

Under penalties of perjury, I declare that I have examined the information on this form, including accompanying schedules and statements, and to the best of my knowledge and belief, it is true, correct, and complete. I further declare under penalties of perjury that if the facts upon which this form are based change, I will promptly notify the withholding agent.

Type or print payee's name and title Telephone ( )

Payee's signature Date

7061173

Form 590 C2 2016

# 2017 Instructions for Form 590

## Withholding Exemption Certificate

References in these instructions are to the California Revenue and Taxation Code (R&TC).

### General Information

**Registered Domestic Partners (RDP)** – For purposes of California income tax, references to a spouse, husband, or wife also refer to a Registered Domestic Partner (RDP) unless otherwise specified. For more information on RDPs, get FTB Pub. 737, Tax Information for Registered Domestic Partners.

### A Purpose

Use Form 590, Withholding Exemption Certificate, to certify an exemption from nonresident withholding.

Form 590 does not apply to payments of backup withholding. For more information, go to [ftb.ca.gov](http://ftb.ca.gov) and search for **backup withholding**.

Form 590 does not apply to payments for wages to employees. Wage withholding is administered by the California Employment Development Department (EDD). For more information, go to [edd.ca.gov](http://edd.ca.gov) or call 888.745.3886.

**Do not** use Form 590 to certify an exemption from withholding if you are a **Seller of California real estate**. Sellers of California real estate use Form 593-C, Real Estate Withholding Certificate, to claim an exemption from the real estate withholding requirement.

**The following are excluded from withholding and completing this form:**

- The United States and any of its agencies or instrumentalities.
- A state, a possession of the United States, the District of Columbia, or any of its political subdivisions or instrumentalities.
- A foreign government or any of its political subdivisions, agencies, or instrumentalities.

### B Income Subject to Withholding

California Revenue and Taxation Code (R&TC) Section 18662 requires withholding of income or franchise tax on payments of California source income made to nonresidents of California.

Withholding is required on the following, but is not limited to:

- Payments to nonresidents for services rendered in California.
- Distributions of California source income made to domestic nonresident partners, members, and S corporation shareholders and allocations of California source income made to foreign partners and members.
- Payments to nonresidents for rents if the payments are made in the course of the withholding agent's business.
- Payments to nonresidents for royalties from activities sourced to California.

- Distributions of California source income to nonresident beneficiaries from an estate or trust.
- Endorsement payments received for services performed in California.
- Prizes and winnings received by nonresidents for contests in California.

However, withholding is optional if the total payments of California source income are \$1,500 or less during the calendar year.

For more information on withholding get FTB Pub. 1017, Resident and Nonresident Withholding Guidelines. To get a withholding publication, see Additional Information.

### C Who Certifies this Form

Form 590 is certified by the payee. California residents or entities exempt from the withholding requirement should complete Form 590 and submit it to the withholding agent before payment is made. The withholding agent is then relieved of the withholding requirements if the agent relies in good faith on a completed and signed Form 590 unless notified by the Franchise Tax Board (FTB) that the form should not be relied upon.

An incomplete certificate is invalid and the withholding agent should not accept it. If the withholding agent receives an incomplete certificate, the withholding agent is required to withhold tax on payments made to the payee until a valid certificate is received. In lieu of a completed exemption certificate, the withholding agent may accept a letter from the payee as a substitute explaining why they are not subject to withholding. The letter must contain all the information required on the certificate in similar language, including the under penalty of perjury statement and the payee's taxpayer identification number (TIN). The withholding agent must retain a copy of the certificate or substitute for at least five years after the last payment to which the certificate applies, and provide it upon request to the FTB.

If an entertainer (or the entertainer's business entity) is paid for a performance, the entertainer's information must be provided. **Do not** submit the entertainer's agent or promoter information.

The grantor of a grantor trust shall be treated as the payee for withholding purposes. Therefore, if the payee is a grantor trust and one or more of the grantors is a nonresident, withholding is required. If all of the grantors on the trust are residents, no withholding is required. Resident grantors can check the box on Form 590 labeled "Individuals — Certification of Residency."

### D Definitions

For California nonwage withholding purposes, **nonresident** includes all of the following:

- Individuals who are not residents of California.
- Corporations not qualified through the California Secretary of State (CA SOS) to do business in California or having no permanent place of business in California.
- Partnerships or limited liability companies (LLCs) with no permanent place of business in California.
- Any trust without a resident grantor, beneficiary, or trustee, or estates where the decedent was not a California resident.

Foreign refers to non-U.S.

For more information about determining resident status, get FTB Pub. 1031, Guidelines for Determining Resident Status. Military servicemembers have special rules for residency. For more information, get FTB Pub. 1032, Tax Information for Military Personnel.

### Permanent Place of Business:

A corporation has a permanent place of business in California if it is organized and existing under the laws of California or it has qualified through the CA SOS to transact intrastate business. A corporation that has not qualified to transact intrastate business (e.g., a corporation engaged exclusively in interstate commerce) will be considered as having a permanent place of business in California only if it maintains a permanent office in California that is permanently staffed by its employees.

### E Military Spouse Residency Relief Act (MSRRA)

Generally, for tax purposes you are considered to maintain your existing residence or domicile. If a military servicemember and nonmilitary spouse have the same state of domicile, the MSRRA provides:

- A spouse shall not be deemed to have lost a residence or domicile in any state solely by reason of being absent to be with the servicemember serving in compliance with military orders.
- A spouse shall not be deemed to have acquired a residence or domicile in any other state solely by reason of being there to be with the servicemember serving in compliance with military orders.

**Domicile** is defined as the one place:

- Where you maintain a true, fixed, and permanent home.
- To which you intend to return whenever you are absent.

A military servicemember's nonmilitary spouse is considered a nonresident for tax purposes if the servicemember and spouse have the same domicile outside of California and the spouse is in California solely to be with the servicemember who is serving in compliance with Permanent Change of Station orders.

California may require nonmilitary spouses of military servicemembers to provide proof that they meet the criteria for California personal income tax exemption as set forth in the MSRRRA.

Income of a military servicemember's nonmilitary spouse for services performed in California is not California source income subject to state tax if the spouse is in California to be with the servicemember serving in compliance with military orders, and the servicemember and spouse have the same domicile in a state other than California.

For additional information or assistance in determining whether the applicant meets the MSRRRA requirements, get FTB Pub. 1032.

- The partnership ceases to have a permanent place of business in California.
- The LLC ceases to have a permanent place of business in California.
- The tax-exempt entity loses its tax-exempt status.

If any of these situations occur, then withholding may be required. For more information, get Form 592, Resident and Nonresident Withholding Statement, Form 592-B, Resident and Nonresident Withholding Tax Statement, and Form 592-V, Payment Voucher for Resident and Nonresident Withholding.

## Additional Information

**Website:** For more information go to [ftb.ca.gov](http://ftb.ca.gov) and search for **nonwage**.  
**MyFTB** offers secure online tax account information and services. For more information and to register, go to [ftb.ca.gov](http://ftb.ca.gov) and search for **myftb**.

**Telephone:** 888.792.4900 or 916.845.4900, Withholding Services and Compliance phone service

**Fax:** 916.845.9512

**Mail:** WITHHOLDING SERVICES AND COMPLIANCE MS F182  
FRANCHISE TAX BOARD  
PO BOX 942867  
SACRAMENTO CA 94267-0651

For questions unrelated to withholding, or to download, view, and print California tax forms and publications, or to access the TTY/TDD numbers, see the information below.

### Internet and Telephone Assistance

**Website:** [ftb.ca.gov](http://ftb.ca.gov)

**Telephone:** 800.852.5711 from within the United States  
916.845.6500 from outside the United States

**TTY/TDD:** 800.822.6268 for persons with hearing or speech impairments

### Asistencia Por Internet y Teléfono

**Sitio web:** [ftb.ca.gov](http://ftb.ca.gov)

**Teléfono:** 800.852.5711 dentro de los Estados Unidos  
916.845.6500 fuera de los Estados Unidos

**TTY/TDD:** 800.822.6268 para personas con discapacidades auditivas o de habla

## Specific Instructions

### Payee Instructions

Enter the withholding agent's name.

Enter the payee's information, including the TIN and check the appropriate TIN box.

You must provide a valid TIN as requested on this form. The following are acceptable TINs: social security number (SSN); individual taxpayer identification number (ITIN); federal employer identification number (FEIN); California corporation number (CA Corp no.); or CA SOS file number.

**Private Mail Box (PMB)** – Include the PMB in the address field. Write "PMB" first, then the box number. Example: 111 Main Street PMB 123.

**Foreign Address** – Follow the country's practice for entering the city, county, province, state, country, and postal code, as applicable, in the appropriate boxes. Do not abbreviate the country name.

**Exemption Reason** – Check the box that reflects the reason why the payee is exempt from the California income tax withholding requirement.

### Withholding Agent Instructions

Do not send this form to the FTB. The withholding agent retains this form for a minimum of five years or until the payee's status changes, and must provide this form to the FTB upon request.

The payee must notify the withholding agent if any of the following situations occur:

- The individual payee becomes a nonresident.
- The corporation ceases to have a permanent place of business in California or ceases to be qualified to do business in California.

## MSRC Prospective Contractor Information

1. Contractor (Legal Name): \_\_\_\_\_

2. Brief Description of Project: \_\_\_\_\_

3. Did Contractor retain a consultant to help prepare the funding application?

☐ Yes    ☐ No

**If YES, identify consultant below and then sign and date the form. If NO, sign and date below.**

Name of Consultant \_\_\_\_\_

**I declare the foregoing disclosure to be true and correct.**

Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_



## DISADVANTAGED BUSINESS CERTIFICATION

Federal guidance for utilization of disadvantaged business enterprises allows a vendor to be deemed a small business enterprise (SBE), minority business enterprise (MBE) or women business enterprise (WBE) if it meets the criteria below.

- is certified by the Small Business Administration or
- is certified by a state or federal agency or
- is an independent MBE(s) or WBE(s) business concern which is at least 51 percent owned and controlled by minority group member(s) who are citizens of the United States.

### Statements of certification:

As a prime contractor to the SCAQMD, \_\_\_\_\_ (name of business) will engage in good faith efforts to achieve the fair share in accordance with 40 CFR Section 33.301, and will follow the six affirmative steps listed below **for contracts or purchase orders funded in whole or in part by federal grants and contracts.**

1. Place qualified SBEs, MBEs, and WBEs on solicitation lists.
2. Assure that SBEs, MBEs, and WBEs are solicited whenever possible.
3. When economically feasible, divide total requirements into small tasks or quantities to permit greater participation by SBEs, MBEs, and WBEs.
4. Establish delivery schedules, if possible, to encourage participation by SBEs, MBEs, and WBEs.
5. Use services of Small Business Administration, Minority Business Development Agency of the Department of Commerce, and/or any agency authorized as a clearinghouse for SBEs, MBEs, and WBEs.
6. If subcontracts are to be let, take the above affirmative steps.

### **Self-Certification Verification: Also for use in awarding additional points, as applicable, in accordance with SCAQMD Procurement Policy and Procedure:**

Check all that apply:

- |   |  |
|---|--|
| <input type="checkbox"/> Small Business Enterprise/Small Business Joint Venture | <input type="checkbox"/> Women-owned Business Enterprise                               |
| <input type="checkbox"/> Local business   | <input type="checkbox"/> Disabled Veteran-owned Business Enterprise/DVBE Joint Venture |
| <input type="checkbox"/> Minority-owned Business Enterprise                     |  |

Percent of ownership: \_\_\_\_\_ %

Name of Qualifying Owner(s): \_\_\_\_\_

**State of California Public Works Contractor Registration No. \_\_\_\_\_ MUST BE INCLUDED IF BID PROPOSAL IS FOR PUBLIC WORKS PROJECT, AS APPLICABLE.**

I, the undersigned, hereby declare that to the best of my knowledge the above information is accurate. Upon penalty of perjury, I certify information submitted is factual.

\_\_\_\_\_  
**A. NAME**

\_\_\_\_\_  
**TITLE**

\_\_\_\_\_  
**B. TELEPHONE NUMBER**

\_\_\_\_\_  
**DATE**

## **Definitions**

**Disabled Veteran-Owned Business Enterprise** means a business that meets all of the following criteria:

- is a sole proprietorship or partnership of which is at least 51 percent owned by one or more disabled veterans, or in the case of any business whose stock is publicly held, at least 51 percent of the stock is owned by one or more disabled veterans; a subsidiary which is wholly owned by a parent corporation but only if at least 51 percent of the voting stock of the parent corporation is owned by one or more disabled veterans; or a joint venture in which at least 51 percent of the joint venture's management and control and earnings are held by one or more disabled veterans.
- the management and control of the daily business operations are by one or more disabled veterans. The disabled veterans who exercise management and control are not required to be the same disabled veterans as the owners of the business.
- is a sole proprietorship, corporation, partnership, or joint venture with its primary headquarters office located in the United States and which is not a branch or subsidiary of a foreign corporation, firm, or other foreign-based business.

**Joint Venture** means that one party to the joint venture is a DVBE and owns at least 51 percent of the joint venture. In the case of a joint venture formed for a single project this means that DVBE will receive at least 51 percent of the project dollars.

**Local Business** means a business that meets all of the following criteria:

- has an ongoing business within the boundary of the SCAQMD at the time of bid application.
- performs 90 percent of the work within SCAQMD's jurisdiction.

**Minority-Owned Business Enterprise** means a business that meets all of the following criteria:

- is at least 51 percent owned by one or more minority persons or in the case of any business whose stock is publicly held, at least 51 percent of the stock is owned by one or more minority persons.
- is a business whose management and daily business operations are controlled or owned by one or more minority person.
- is a business which is a sole proprietorship, corporation, partnership, joint venture, an association, or a cooperative with its primary headquarters office located in the United States, which is not a branch or subsidiary of a foreign corporation, foreign firm, or other foreign business.

"Minority" person means a Black American, Hispanic American, Native American (including American Indian, Eskimo, Aleut, and Native Hawaiian), Asian-Indian American (including a person whose origins are from India, Pakistan, or Bangladesh), Asian-Pacific American (including a person whose origins are from Japan, China, the Philippines, Vietnam, Korea, Samoa, Guam, the United States Trust Territories of the Pacific, Northern Marianas, Laos, Cambodia, or Taiwan).

**Small Business Enterprise** means a business that meets the following criteria:

- a. 1) an independently owned and operated business; 2) not dominant in its field of operation; 3) together with affiliates is either:
  - A service, construction, or non-manufacturer with 100 or fewer employees, and average annual gross receipts of ten million dollars (\$10,000,000) or less over the previous three years, or
  - A manufacturer with 100 or fewer employees.
- b. Manufacturer means a business that is both of the following:
  - 1) Primarily engaged in the chemical or mechanical transformation of raw materials or processed substances into new products.
  - 2) Classified between Codes 311000 to 339000, inclusive, of the North American Industrial Classification System (NAICS) Manual published by the United States Office of Management and Budget, 2007 edition.

**Small Business Joint Venture** means that one party to the joint venture is a Small Business and owns at least 51 percent of the joint venture. In the case of a joint venture formed for a single project this means that the Small Business will receive at least 51 percent of the project dollars.

**Women-Owned Business Enterprise** means a business that meets all of the following criteria:

- is at least 51 percent owned by one or more women or in the case of any business whose stock is publicly held, at least 51 percent of the stock is owned by one or more women.
- is a business whose management and daily business operations are controlled or owned by one or more women.
- is a business which is a sole proprietorship, corporation, partnership, or a joint venture, with its primary headquarters office located in the United States, which is not a branch or subsidiary of a foreign corporation, foreign firm, or other foreign business.



## CAMPAIGN CONTRIBUTIONS DISCLOSURE

In accordance with California law, bidders and contracting parties are required to disclose, at the time the application is filed, information relating to any campaign contributions made to Board Members or members/alternates of the MSRC, including: the name of the party making the contribution (which includes any parent, subsidiary or otherwise related business entity, as defined below), the amount of the contribution, and the date the contribution was made. 2 C.C.R. §18438.8(b).

California law prohibits a party, or an agent, from making campaign contributions to SCAQMD Governing Board Members or members/alternates of the Mobile Source Air Pollution Reduction Review Committee (MSRC) of more than \$250 while their contract or permit is pending before the SCAQMD; and further prohibits a campaign contribution from being made for three (3) months following the date of the final decision by the Governing Board or the MSRC on a donor's contract or permit. Gov't Code §84308(d). For purposes of reaching the \$250 limit, the campaign contributions of the bidder or contractor plus contributions by its parents, affiliates, and related companies of the contractor or bidder are added together. 2 C.C.R. §18438.5.

In addition, Board Members or members/alternates of the MSRC must abstain from voting on a contract or permit if they have received a campaign contribution from a party or participant to the proceeding, or agent, totaling more than \$250 in the 12-month period prior to the consideration of the item by the Governing Board or the MSRC. Gov't Code §84308(c).

The list of current SCAQMD Governing Board Members can be found at the SCAQMD website ([www.aqmd.gov](http://www.aqmd.gov)). The list of current MSRC members/alternates can be found at the MSRC website (<http://www.cleantransportationfunding.org>).

### **SECTION I.**

**Contractor (Legal Name):** \_\_\_\_\_

- |   |
|---|
| <input type="checkbox"/> DBA, Name _____, County Filed in _____ |
| <input type="checkbox"/> Corporation, ID No. _____              |
| <input type="checkbox"/> LLC/LLP, ID No. _____                  |

**List any parent, subsidiaries, or otherwise affiliated business entities of Contractor:**  
*(See definition below).*

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### **SECTION II.**

Has Contractor and/or any parent, subsidiary, or affiliated company, or agent thereof, made a campaign contribution(s) totaling \$250 or more in the aggregate to a current member of the South

Coast Air Quality Management Governing Board or member/alternate of the MSRC in the 12 months preceding the date of execution of this disclosure?

☐ Yes    ☐ No    **If YES, complete Section II below and then sign and date the form.  
If NO, sign and date below. Include this form with your submittal.**

**Campaign Contributions Disclosure, *continued*:**

Name of Contributor \_\_\_\_\_

_____	_____	_____
Governing Board Member or MSRC Member/Alternate	Amount of Contribution	Date of Contribution

Name of Contributor \_\_\_\_\_

_____	_____	_____
Governing Board Member or MSRC Member/Alternate	Amount of Contribution	Date of Contribution

Name of Contributor \_\_\_\_\_

_____	_____	_____
Governing Board Member or MSRC Member/Alternate	Amount of Contribution	Date of Contribution

Name of Contributor \_\_\_\_\_

_____	_____	_____
Governing Board Member or MSRC Member/Alternate	Amount of Contribution	Date of Contribution

**I declare the foregoing disclosures to be true and correct.**

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

## DEFINITIONS

### **Parent, Subsidiary, or Otherwise Related Business Entity (2 Cal. Code of Regs., §18703.1(d).)**

- (1) Parent subsidiary.** A parent subsidiary relationship exists when one corporation directly or indirectly owns shares possessing more than 50 percent of the voting power of another corporation.
- (2) Otherwise related business entity.** Business entities, including corporations, partnerships, joint ventures and any other organizations and enterprises operated for profit, which do not have a parent subsidiary relationship are otherwise related if any one of the following three tests is met:
  - (A) One business entity has a controlling ownership interest in the other business entity.**
  - (B) There is shared management and control between the entities. In determining whether there is shared management and control, consideration should be given to the following factors:**
    - (i) The same person or substantially the same person owns and manages the two entities;**
    - (ii) There are common or commingled funds or assets;**
    - (iii) The business entities share the use of the same offices or employees, or otherwise share activities, resources or personnel on a regular basis;**
    - (iv) There is otherwise a regular and close working relationship between the entities; or**
  - (C) A controlling owner (50% or greater interest as a shareholder or as a general partner) in one entity also is a controlling owner in the other entity.**

BOARD MEETING DATE: June 2, 2017

AGENDA NO. 11

**PROPOSAL:** Authorize Staff to Submit Letter of Support for CARB Locomotive Petition to U.S. EPA

**SYNOPSIS:** On April 13, 2017, CARB petitioned the U.S. EPA to adopt more stringent emission standards for locomotives. CARB seeks updated emission standards for new and remanufactured locomotives. New “Tier 5” standards for new locomotives, beginning in year 2025, would obtain up to 99% NOx and PM controls relative to uncontrolled locomotives. Such locomotives would also have the capability for zero-emission operations in designated areas. Standards for remanufactured locomotives would begin in year 2023 and would differ according to date of manufacture. CARB states that its 2016 Technology Assessment for Freight Locomotives demonstrates that these standards are feasible. CARB’s Petition is consistent with the need demonstrated in the 2016 AQMP for U.S. EPA to implement greater controls for sources that are under federal authority. Staff requests authorization to send a letter of support to U.S. EPA to support CARB’s petition, and to urge U.S. EPA to adopt stringent new standards as soon as feasible.

**COMMITTEE:** Mobile Source, May 19, 2017; Recommended for Approval

**RECOMMENDED ACTION:**

Authorize staff to submit the attached letter of support to U.S. EPA for the California Air Resources Board’s Petition for Rulemaking regarding locomotive engines, filed April 13, 2017.

Wayne Nastri  
Executive Officer

## **Background**

Locomotives contribute significantly to the air pollution problems in the South Coast Air Basin. In 2012, their NO<sub>x</sub> emissions exceeded 19 tpd, which is greater than NO<sub>x</sub> emissions from the entire RECLAIM universe of sources. As recognized in the 2016 AQMP, this region needs substantial reductions of NO<sub>x</sub> to attain the federal clean-air standards for ozone and PM<sub>2.5</sub>. Locomotives also emit diesel particulate matter, a pollutant that is recognized by CARB as a human carcinogen and is responsible for almost 70% of the total cancer risk from toxic air contaminants in the Basin, according to the SCAQMD Multiple Air Toxics Exposure Study, May 2015 (“MATES IV”).

Under the Clean Air Act, state and local agencies are absolutely preempted from setting emission standards for new locomotives. California has no ability to receive a waiver of preemption from U.S. EPA, as it can for motor vehicle standards and standards for most other non-road engines. 42 U.S.C. § 7543(e). In its initial locomotive rulemaking in 1998, U.S. EPA defined “new” locomotives to include “remanufactured” locomotives, so as a practical matter there are very few locomotives for which U.S. EPA may authorize CARB to adopt standards. Almost all locomotives are exclusively subject to U.S. EPA standard-setting.

U.S. EPA most recently updated its locomotive standards in 2008. The most stringent current standard is called “Tier 4” and applies to locomotives made in 2015 or later. CARB’s mobile source strategy for the 2016 state implementation plan included a provision that CARB would petition U.S. EPA to adopt updated, more stringent standards. The CARB Board approved the state strategy along with the 2016 AQMP on March 23, 2017. On April 13, 2017, CARB submitted a Petition for Rulemaking to U.S. EPA. The Petition asked U.S. EPA to adopt a new “Tier 5” standard for new locomotives that would be effective for engines manufactured in 2025 and thereafter.<sup>1</sup> The proposed standards would be 0.2 g/bhp-hr for NO<sub>x</sub> and less than 0.01 g/bhp-hr for PM, along with standards for GHGs and hydrocarbons. The Petition also asked U.S. EPA to establish increasingly more stringent standards for remanufactured locomotives. Those originally manufactured in 2005-2014 would be required to meet 1.3 g/bhp-hr for NO<sub>x</sub> upon remanufacture, beginning in 2023, whereas engines originally manufactured in 2015-2024 would have to meet 0.3 g/bhp-hr for NO<sub>x</sub> and less than 0.01 g/bhp-hr PM upon remanufacture, also beginning in 2023. CARB staff concluded that these standards are attainable for both switch locomotives and line-haul locomotives in freight and passenger rail service.

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<sup>1</sup> The CARB petition is available at <https://www.arb.ca.gov/railyard/railyard.htm>



**Proposal**

Staff requests approval to send the attached letter of support for CARB's Petition to U.S. EPA. The Bay Area Air Quality Management District sent a letter of support on May 1, 2017. Since only U.S. EPA may establish emission standards for new and remanufactured locomotives, U.S. EPA rulemaking is essential to obtain every feasible reduction in NO<sub>x</sub>, which is critical for implementing the 2016 AQMP. Furthermore, cleaner engines will greatly reduce the amount of diesel particulates emitted by locomotives, thus reducing cancer risk due to toxic air contaminants in areas where locomotives operate, including at railyards.

**Resource Impacts**

Staff has prepared a draft letter for the Board's consideration, and will make any changes requested by the Board using existing resources.

**Attachment**

Draft SCAQMD Letter of Support for CARB Locomotive Petition to U.S. EPA

# DRAFT

*Office of the Executive Officer*  
*Wayne Nastri*  
909.396.2100, fax 909.396.3340

June 2, 2017

***via e-mail and U.S. Mail***

The Honorable Scott Pruitt, Administrator  
Office of the Administrator  
United States Environmental Protection Agency  
1200 Pennsylvania Avenue NW  
Mail Code 1101A  
Washington DC 20460

Re: Adoption of New Emission Standards for New and Remanufactured  
Locomotives and Locomotive Engines

Dear Administrator Pruitt:

The South Coast Air Quality Management District (SCAQMD) strongly supports the petition by the California Air Resources Board (CARB) requesting the U. S. Environmental Protection Agency to promulgate more stringent emission standards for new and remanufactured locomotives.

The SCAQMD is the regional agency responsible for air pollution control in Orange County and the urban portions of Los Angeles, Riverside, and San Bernardino Counties in California. Its 17 million residents breathe the most polluted air in the nation for ozone and the second most polluted air for PM<sub>2.5</sub>. The SCAQMD must reduce NO<sub>x</sub> emissions in the year 2023 by 45% beyond projected emissions with all existing regulations to attain the 1997 8-hour ozone standard. To attain the 2008 ozone standard, the SCAQMD must reduce NO<sub>x</sub> emissions in the year 2031 by 55% beyond projected emissions with all existing regulations in place. These required reductions must come on top of decades of stringent regulation of stationary sources by the SCAQMD and mobile sources by the CARB. EPA has recognized these regulations as generally the most stringent in the nation. 77 Fed. Reg. 12,674; 12,686 col. 3 (Mar. 1, 2012).

Locomotives represent a very significant source of NO<sub>x</sub> emissions in the South Coast Air Basin. In 2012, locomotives emitted more than 19 tons per day of NO<sub>x</sub>, which is more than all the NO<sub>x</sub>

emissions from the almost 270 largest stationary sources of NO<sub>x</sub> in the SCAQMD (“RECLAIM sources”), which includes virtually all NO<sub>x</sub> major sources as well as sources exceeding 4 tpy NO<sub>x</sub>. SCAQMD recently adopted requirements for these RECLAIM sources to reduce their NO<sub>x</sub> emissions by another 45% by 2023. Mobile sources, including locomotives, will contribute 79% of the NO<sub>x</sub> emissions in 2023 (without further rules). They will contribute about 77% in 2031. Thus it would be impossible to attain the NAAQS for ozone in 2023 and 2031 without significant further reductions from mobile sources. Therefore, it is critical that mobile sources contribute their “fair share” towards attaining the upcoming ozone standards.

CARB’s petition has proposed feasible standards for NO<sub>x</sub>, PM and other pollutants which can be implemented by 2025 for new locomotives. Assuming EPA completes a rulemaking in 2018, locomotive engine manufacturers will have seven years to develop and produce engines meeting the new standards. According to CARB, this is sufficient time to implement the new standards. Remanufactured locomotives would be subject to new standards beginning in 2023, but the standards are less stringent.

Moreover, locomotives emit substantial quantities of diesel particulate matter (DPM) which is a human carcinogen and identified by CARB as a “toxic air contaminant” under state law. The SCAQMD 2015 “Multiple Air Toxics Exposure Study” (“MATES IV”), concluded that DPM caused almost 70% of all the cancer risk due to toxic air contaminants in the South Coast Air Basin.

Importantly, locomotive emissions are concentrated not only along line-haul routes, but also in areas adjacent to railyards. These railyards tend to be located in environmental justice communities, where they expose residents to high levels of cancer-causing diesel particulate matter. Reducing particulate emissions from locomotives will help reduce carcinogenic emissions in environmental justice communities and throughout the district.

As noted above, the CARB petition asks for new standards to be implemented in 2023 and 2025. Therefore, any NO<sub>x</sub> emissions reductions from EPA’s new rules would come too late to help SCAQMD attain the 1997 ozone standard by 2023. Therefore, we urge EPA to consider whether these standards could be phased in and begin earlier than 2023. If possible, we urge EPA to require earlier phased-in implementation.

Section 213(a)(5) of the CAA requires EPA to regulate locomotive emissions. EPA has previously recognized that it must periodically update these regulations to make use of technology advances and better protect public health. 72 Fed. Reg. 15938, 15940 col. 3 (Apr. 3, 2007). We concur with CARB’s request that EPA respond to the petition this summer. EPA must respond to a petition for rulemaking within a “reasonable time.” A reasonable time is generally “weeks or months not years.” *In re Am. Rivers & Idaho Rivers United*, 372 F.3d 413, 419 (D.C. Cir. 2004).

Finally, we strongly support CARB's request that the "Tier 5" standards, to be implemented for new locomotives by 2025, include a requirement that these locomotives be capable of operating in zero-emissions mode in designated areas. As stated by CARB, "use of on-board batteries can support zero-emission rail operation in sensitive areas, as well as cut fuel consumption and greenhouse gas emissions." These zero-emission technologies may be particularly important when locomotives are operating in railyards. Several years ago, CARB calculated cancer health risks from various railyards throughout the state. The San Bernardino yard was calculated to have a cancer risk to the maximally exposed individual of about 2500 in a million.<sup>1</sup> This is 100 times the risk allowed for a stationary source under AB 2588 and SCAQMD Rule 1402. Operation in zero-emissions mode could cut these risks — and risks at other railyards — to very little, without significantly impacting rail operations since battery-tender cars could easily be utilized at the railyards.

Of course, zero-emissions operation also reduces NO<sub>x</sub> and GHG emissions, which are critical to attaining the NAAQS and the state's GHG reduction goals.

SCAQMD stands ready to offer its technical expertise, data, and any other assistance to help EPA adopt and implement the CARB-proposed standards as soon as possible.

The SCAQMD appreciates U.S. EPA's consideration of this letter in strong support of CARB's petition. If you have any question or need further information, please contact me at 909-396-2100 or [wnastri@aqmd.gov](mailto:wnastri@aqmd.gov).

Sincerely,

Wayne Nastri,  
Executive Officer

WN:BB/pa

cc: Richard Corey, Executive Officer, California Air Resources Board

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<sup>1</sup> This risk would be even higher considering the 2015 OEHHA guidance changes.

BOARD MEETING DATE: June 2, 2017

AGENDA NO. 12

REPORT: Legislative, Public Affairs and Media Report

SYNOPSIS: This report highlights the April 2017 outreach activities of the Legislative, Public Affairs and Media Office, which include: an Environmental Justice Update, Community Events/Public Meetings, Business Assistance, Media Relations and Outreach to Business and Federal, State, and Local Government.

COMMITTEE: No Committee Review

RECOMMENDED ACTION:  
Receive and file.

Wayne Nastri  
Executive Officer

FW:MC:DM

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## **BACKGROUND**

This report summarizes the activities of the Legislative, Public Affairs and Media Office for April 2017. The report includes five major areas: Environmental Justice Update; Community Events/Public Meetings (including the Speakers Bureau/Visitor Services, Communications Center, and Public Information Center); Business Assistance; Media Relations, Outreach to Business and Federal, State and Local Governments.

## **ENVIRONMENTAL JUSTICE UPDATE**

The following are key environmental justice-related activities in which staff participated during April 2017. These events involve communities which suffer disproportionately from adverse air quality impacts.

### April 6

- Staff met with the city of Compton to share SCAQMD's Clearance Letter process and the permit checklist.

#### April 10-11

- Staff attended the Environmental Health and Environmental Justice Symposium at the California Endowment in Los Angeles. The event was organized by the Del Amo Action Committee and featured panels related to air pollution, water quality, public health and community organizing. Staff networked with individuals from non-profit organizations, community groups and agency representatives who were interested in learning more about SCAQMD's environmental justice efforts and events.

#### April 12

- Staff communicated with Yenni Diaz, Program Director at the Orange County Environmental Justice Project (OC EJ Project), to learn more about the initiatives of the organization and to share details about SCAQMD's environmental justice efforts. The OC EJ Project aims to address environmental justice issues in Orange County by increasing community participation and education. Staff and Mr. Diaz agreed to identify opportunities for collaboration in the future.

#### April 14

- Staff met with Joseph Williams of the Youth Action Project (YAP) in San Bernardino, to discuss opportunities for collaboration on environmental justice initiatives in San Bernardino County.

#### April 18

- Staff communicated with the Leadership Counsel for Justice and Accountability, as well as Comite Civico del Valle to discuss partnering on a community workshop in Riverside County.

#### April 18

- Staff communicated with Christie Vosburg, Assistant General Counsel at the California Environmental Protection Agency, about the possibility of partnering on an inter-agency summit in Los Angeles, to address how agencies handle environmental complaints within Los Angeles County.

#### April 21

- Staff met with Reach Out, from San Bernardino County, to follow up on the possibility of partnering on a community workshop.

#### April 25

- Staff attended the Carson City Council Ad Hoc Committee on Logistics meeting to hear discussion on a draft ordinance to implement a temporary moratorium prohibiting the establishment, expansion or modification of truck yards, logistics facilities, hazardous materials or waste facilities, container storage, and container parking in the city. The City Council subsequently approved the temporary moratorium on May 2, 2017.

#### April 27

- Staff attended the Coachella Valley Environmental Justice Task Force meeting at the Coachella Valley Mosquito and Vector Control District. Staff provided an update on recent agricultural burning activities.

### **COMMUNITY EVENTS/PUBLIC MEETINGS**

Each year SCAQMD staff engage with thousands of residents, providing valuable information about the agency, incentive programs and ways individuals can help reduce air pollution, through events and meetings sponsored solely by SCAQMD or in partnership with others. Attendees typically receive the following information:

- Tips on reducing their exposure to smog and its health effects;
- Clean air technologies and their deployment;
- Invitations or notices of conferences, seminars, workshops and other public events;
- SCAQMD incentive programs;
- Ways to participate in SCAQMD's rule and policy development; and
- Assistance in resolving air pollution-related problems.

SCAQMD staff attended and/or provided information and updates at the following events:

#### April 1

- SCAQMD Refinery Committee Investigative Hearing related to Torrance Refinery, Torrance Marriot Redondo Beach Hotel.

#### April 7

- Farmdale Elementary School Health Fair, Los Angeles.

#### April 8

- SCAQMD Refinery Committee Investigative Hearing related to Torrance Refinery, Torrance City Hall.

#### April 17

- USC Environmental Sciences, Air Pollution, Obesity and Parks Event, The California Endowment, Los Angeles.

#### April 19

- SCAQMD Rule 1410 Working Group Meeting, Toyota Meeting Hall, Torrance Cultural Arts Center.
- Los Angeles County Earth Day LA Event, Grand Park, Los Angeles.
- SCAQMD Hearing Board Hearing on Torrance Refining Company, Petition for Short Variance, Diamond Bar.

#### April 19-21

- SCAQMD hosted three days of U.S. Congressional staff visits.

#### April 20

- City of Colton Employee Health/Safety/Earth Day/Rideshare Fair, Colton City Hall.
- International Trade Education Program (ITEP) Event, Carson High School.

#### April 22

- Plug-In America Plug-In Earth Day Festival, Lynwood Civic Center.
- Bolsa Chica Conservancy Earth Day Festival 2017, Bolsa Chica Ecological Reserve, Huntington Beach.
- City of Manhattan Beach Earth Day Festival 2017, Manhattan Beach Polliwog Park.
- City of Whittier Earth Day Event, Greenleaf Grass Lot.
- City of Diamond Bar Earth Day Event, SCAQMD Parking Lot.
- City of Claremont Earth Day Celebration Event, Claremont Village.
- Los Angeles Sanitation District Earth Day LA 2017 Event, Exposition Park.

#### April 26

- SCAQMD Hearing Board Hearing on Torrance Refining Company Petition for Short Variance, Diamond Bar.

#### April 27

- SCAQMD Rule 1118 Working Group in Wilmington Meeting, Wilmington Senior Center.

### **SPEAKERS BUREAU/VISITOR SERVICES**

SCAQMD regularly receives requests for staff to speak on air quality-related issues from a wide variety of organizations, such as trade associations, chambers of commerce, community-based groups, schools, hospitals and health-based organizations. SCAQMD also hosts visitors from around the world who meet with staff on a wide range of air quality issues.

#### April 7

- Staff presented an overview of SCAQMD, air quality, clean air alternative fuel vehicles and the health effects of smog to 500 students and teachers at the Health Fair at Farmdale Elementary School in Los Angeles.
- Twenty-five students and staff from Rio Hondo College in Whittier visited SCAQMD headquarters, and were provided an overview of SCAQMD and air quality, a tour of SCAQMD's laboratory, and were shown clean air alternative fuel vehicles.



#### April 20

- Forty students and staff from Don Antonio Lugo High School's LEAD Engineering Academy in Chino visited SCAQMD headquarters. They were provided presentations on engineering and qualifications for an Air Quality Specialist job, a tour of SCAQMD's laboratory, and were shown clean air alternative fuel vehicles.

#### April 21

- A delegation of 35 officials from Kaoshiung Taiwan visited SCAQMD headquarters and were provided an overview of SCAQMD, as well as approaches to better control air pollution and enforce rules. They then toured SCAQMD's laboratory and were shown clean air alternative fuel vehicles.

### **COMMUNICATION CENTER STATISTICS**

The Communication Center handles calls on SCAQMD's main line, 1-800-CUT-SMOG® line, the Spanish line, and after-hours calls to each of those lines. Total calls received in the month of April were:

Calls to SCAQMD's Main Line and 1-800-CUT-SMOG® Line	2,515
Calls to SCAQMD's Spanish-language Line	<u>28</u>
Total Calls	2,543

### **PUBLIC INFORMATION CENTER STATISTICS**

The Public Information Center (PIC) handles phone calls and walk-in requests for general information. Information for the month of March is summarized below:

Calls Received by PIC Staff	163
Calls to Automated System	<u>641</u>
Total Calls	804
Visitor Transactions	218
Email Advisories Sent	1,839

## **BUSINESS ASSISTANCE**

SCAQMD notifies local businesses of proposed regulations so they can participate in the agency's rule development process. SCAQMD also works with other agencies and governments to identify efficient, cost-effective ways to reduce air pollution and shares that information broadly. Staff provides personalized assistance to small businesses both over the telephone and via on-site consultation. The information is summarized below:

- Provided permit application assistance to 194 companies;
- Conducted 2 free on-site consultations;
- Issued 74 clearance letters;
- Provided assistance in filing 1 request for variance;

### **Types of businesses assisted**

Auto Body Shops	Dry Cleaners	Furniture Refinishing Facilities
Engineering Firm	Gas Stations	Auto Repair Centers
Construction Firm	Restaurants	Printing Facilities
Architecture Firm	Breweries	Manufacturing Facilities
Plating Facilities		

## **MEDIA RELATIONS**

The Media Office handles all SCAQMD outreach and communications with television, radio, newspapers and all other publications and media operations.

### **Total Media Inquiries: 129**

#### **Major Media Topics for April:**

- **Paramount Hexavalent Chromium Investigation** – The Media Office edited a draft news release from the City of Paramount on a new joint effort by the city and SCAQMD to forward business permit renewal applications from the city to SCAQMD so that our staff can review them and determine whether an SCAQMD permit is required. The Press-Telegram inquired about our hexavalent chromium investigation of facilities in southern Paramount including Mattco, Press Forge and Weber Metals. The reporter also inquired about monitored levels of hex chrome at Paramount schools.
- **PBF Torrance Refinery and HF Acid Rule 1410:** SCAQMD staffed the April 1 hearing and conducted multiple interviews with TV, print and radio outlets. Media outlets attending the event included: KCBS 2/9; KNBC; ABC7; KTTV Fox 11; KTLA 5; KNX radio; Univision; The Daily Breeze; LA Times; and Torrance City TV. Several dozen stories on the hearing ran on Saturday and Sunday. SCAQMD also staffed the April 8 hearing and conducted multiple interviews with TV and radio outlets including: KCBS 2/9; ABC7; KTTV Fox

11; KTLA 5; and KNX Radio. Approximately one dozen stories on the hearing ran over the weekend and Monday.

- **Proposed Rule 1410:** Bloomberg News inquired regarding the status of the HF rule. KPCC requested and we provided the sign-in sheet from the first Rule 1410 working group meeting and the staff presentation given at the meeting.
- **Asbestos Abatement:** The Orange County Register inquired about a resident who said she made a complaint to SCAQMD about improper asbestos abatement in her townhouse. Staff followed up with an OC Register consumer reporter in regard to the complaint. We informed the reporter that SCAQMD staff had responded to the resident's complaint and visited her residence, but there was no ongoing renovation or demolition at the time of the inspector visit so compliance could not be determined.
- **SB 1 Trucker Amendment:** The LA Times inquired about the "trucker amendment" to SB 1 that would potentially limit future retrofits required of trucks. We spoke with the writer and explained our concerns. An editorial firmly supporting our position was published in The Times on April 6. Kaiser Health News and the Press-Enterprise conducted interviews with staff on the SB 1 trucker amendment, focusing on the potential impact of the amendment.
- **LA's Air Quality** – Seoul Broadcasting System (SBS) did an on-camera interview on April 11 regarding air quality in Southern California and how SCAQMD and other agencies have successfully reduced air pollution. SBS is doing a story due to very poor air quality in Seoul.
- **Air Pollution Documentary** – A student with the Annenberg School of Journalism/USC interviewed staff on April 27 on the subject of LA's historic fight against air pollution, for use in a documentary dissertation. A brief lab tour was also included.
- **Air Toxics Initiative** – We were interviewed by KNX radio on SCAQMD's Air Toxics Initiative. Using the news release for talking points, we discussed the goals and projected cost of the initiative.
- **Southern California Edison Hybrid Electric/Gas Turbine Power Plant** – Stories ran in several papers affiliated with the Southern California News Group. Staff was quoted from an event regarding the plant.

## Media Campaigns

- **Google Ad Campaign:** The Check Before You Burn (CBYB) campaign ended on February 28, 2017. The campaign received 8,385 clicks, over 110 million impressions at a total cost of \$199,392. The Right to Breathe campaign received 13,443 clicks, 9.2 million impressions, and \$62,938 has been spent as of the end of April.
- **Check Before You Burn**
  - A final report on the 2016/17 CBYB season was presented to staff by the contractor Westbound on April 6.
  - Staff provided a presentation to the Environmental Justice Advisory Group on April 28 on outreach during the 2016/17 CBYB season.

## Press Event Request

- U.S. EPA has invited SCAQMD to participate in a joint press event at a date and location TBD to announce the 2016 Targeted Air Shed Grant awarded to SCAQMD by the U.S. EPA, which will be used for ZEV yard tractors at POLA and commercial ZEV lawn and garden equipment. Staff is working with Region 9 to coordinate a mutually convenient date.

## OUTREACH TO COMMUNITY GROUPS AND FEDERAL, STATE, AND LOCAL GOVERNMENTS

Field visits and/or communications were conducted with elected officials or staff from the following cities:

Alhambra	Fountain Valley	Rolling Hills
Arcadia	Glendale	Redlands
Artesia	Glendora	Rosemead
Azusa	Laguna Hills	San Bernardino
Baldwin Park	Lawndale	San Dimas
Banning	La Cañada Flintridge	San Gabriel
Burbank	La Puente	San Marino
Carson	La Verne	Sierra Madre
Colton	Los Angeles	South El Monte
Chino	Malibu	South Pasadena
Claremont	Manhattan Beach	Temple City
Coachella	Monrovia	Torrance
Colton	Monterey Park	Walnut
Covina	Palos Verdes Estates	West Covina
Diamond Bar	Pasadena	Westminster
Duarte	Pomona	Whittier
El Monte	Rancho Cucamonga	Yucaipa

Visits and/or communications were conducted with elected officials or staff from the following state and federal offices:

- U.S. Congresswoman Judy Chu
- U.S. Congressman Brad Sherman
- State Senator Ed Hernandez
- State Senator Mike Morrell
- State Senator Anthony Portantino
- State Senator Josh Newman
- Assembly Member Raul Bocanegra
- Assembly Member Richard Bloom
- Assembly Member Philip Chen
- Assembly Member Ed Chau
- Assembly Member Matthew Debabneh
- Assembly Member Laura Friedman
- Assembly Member Vince Fong
- Assembly Member Eduardo Garcia
- Assembly Member Todd Gloria
- Assembly Member Matthew Harper
- Assembly Member Chris Holden
- Assembly Member Adrian Nazarian
- Assembly Member Al Muratsuchi
- Assembly Member Anthony Portantino
- Assembly Member Miguel Santiago
- Assembly Member Sharon Quirk-Silva

Staff represented SCAQMD and/or provided updates or a presentation to the following governmental agencies and business organizations:

Arcadia Chamber of Commerce  
California Air Resources Board  
Cabazon Band of Mission Indians  
Chino Valley Chamber of Commerce  
Coachella Valley Economic Partnership  
Coachella Valley Mosquito & Vector Control District  
Desert Valley Business Association

Five Mountain Communities Government Affairs Committee  
Greater Coachella Valley Chamber of Commerce  
Las Virgenes-Malibu Council of Governments  
League of California Cities, Los Angeles County Division  
League of California Cities, Legislative Committee, Inland Empire Division  
Legislative Affairs Committee of West Orange County  
Los Angeles Area Chamber of Commerce  
Redlands Chamber of Commerce  
San Bernardino Council of Governments  
San Gabriel Valley Council of Governments  
San Gabriel Valley Economic Partnership  
South Bay Cities Council of Governments  
South Orange County Economic Coalition  
South Pasadena Chamber of Commerce  
Southern California Gas Company  
Torrez-Martinez Desert Cahuilla Indians  
Twenty-Nine Palms Band of Mission Indians

U.S. Chamber of Commerce, Western Region  
Valley Industry and Commerce Association, Van Nuys  
Wilmington Chamber of Commerce  
Yucaipa Chamber of Commerce

Staff represented SCAQMD and/or provided updates or a presentation to the following community and educational groups and organizations:

Carson High School  
Chino Valley Unified School District  
Coachella Valley Environmental Justice Task Force  
Farmdale Elementary School, Los Angeles  
Inland Action, Inland Empire  
Lake Balboa Neighborhood Council  
Los Angeles Public Library, Wilmington  
Loma Linda University  
Orange County Environmental Justice Project  
Reach Out, San Bernardino County  
Rio Honda College, Whittier  
Wilmington Neighborhood Council  
Wilmington Senior Center

 [Back to Agenda](#)

BOARD MEETING DATE: June 2, 2017

AGENDA NO. 13

REPORT: Hearing Board Report

SYNOPSIS: This reports the actions taken by the Hearing Board during the period of April 1 through April 30, 2017.

COMMITTEE: No Committee Review

RECOMMENDED ACTION:  
Receive and file this report.

Edward Camarena  
Chairman of Hearing Board

DG

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Two summaries are attached: **April 2017 Hearing Board Cases** and **Rules From Which Variances and Orders for Abatement Were Requested in 2017**. An Index of District Rules is also attached.

The total number of appeals filed during the period April 1 to April 30, 2017 is 1; and total number of appeals filed during the period of January 1 to April 30, 2017 is 2.

## Report of April 2017 Hearing Board Cases

Case Name and Case No. (SCAQMD Attorney)	Rules	Reason for Petition/Hearing	District Position/ Hearing Board Action	Type and Length of Variance or Order	Excess Emissions
1. Phillips 66 Company Case No. 4900-102 (M. Reichert)	203(b) 2004(f)(1) 3002(c)(1)	Extension of FCD, petitioner awaiting issuance of permit.	Not Opposed/Granted	RV granted commencing 4/18/17 and continuing through 8/16/17, the FCD.	None
2. SCAQMD vs. Aerocraft Heat Treating Co., Inc.; Anaplex Corp.; and Does 1-100 (Re: Anaplex only) Case No. 6066-1 (W. Wong)	402 H&S §41700	Status report.	Stipulated/Issued	The Hearing Board adopted and ordered Anaplex to adhere to a schedule for submittal of its outstanding applications for control equipment.	N/A
3. SCAQMD vs. Aerocraft Heat Treating Co., Inc.; Anaplex Corp.; and Does 1-100 (Re: Aerocraft only) Case No. 6066-1 (W. Wong)	N/A	Status report.	No Action	The Hearing Board received a status report regarding Aerocraft and determined no action was necessary to modify the O/A.	N/A
4. SCAQMD vs. Lereta, LLC Case No. 6074-1 (N. Feldman)	203(a)	Respondent operating noncompliant emergency generator ICE.	Stipulated/Issued	O/A issued commencing 4/19/17; the Hearing Board shall retain jurisdiction over this matter until 1/31/18.	N/A
5. SCAQMD vs. Security Paving Co., Inc.; Recycled Base Materials, Inc. Case No. 6073-1 (N. Feldman)	203(b) 403(d)(1) 403(d)(2) 403(d)(4)	Dust from rock crushing operation.	Stipulated/Issued	O/A issued commencing 4/12/17; the Hearing Board shall retain jurisdiction over this matter until 3/30/18.	N/A
6. SCAQMD vs. Waste Management Recycling and Disposal Services of California, Inc. Case No. 3824-14 (N. Feldman)	203(a)	Extension of FCD while respondent awaits permit issuance from city.	Stipulated/Issued	Mod. O/A issued commencing 4/25/17 and continuing through 9/1/17; the Hearing Board shall continue to retain jurisdiction over this matter until 3/30/18.	N/A
7. Torrance Refining Company LLC Case No. 6060-8 (D. Hsu, N. Sanchez & N. Feldman)	202(a) 203(b) 2004(f)(1) 3002(c)(1)	Petitioner must disconnect control equipment for maintenance.	Not Opposed/Granted	SV & AOC granted for a 10-day period and a 30- day period between 4/29/17 and 7/1/17.	None

### Acronyms

AOC: Alternative Operating Condition  
FCD: Final Compliance Date  
H&S: Health & Safety Code  
ICE: Internal Combustion Engine

MFCD/EXT: Modification of a Final Compliance Date and  
Extension of a Variance  
Mod. O/A: Modification of Order for Abatement

O/A: Order for Abatement  
SV: Short Variance  
RV: Regular Variance



[illegible]

## **DISTRICT RULES AND REGULATIONS INDEX FOR 2017 HEARING BOARD REPORT**

### **REGULATION II – PERMITS**

Rule 202      Temporary Permit to Operate  
Rule 203      Permit to Operate

### **REGULATION IV – PROHIBITIONS**

Rule 402      Nuisance  
Rule 403      Fugitive Dust  
Rule 442      Usage of Solvents  
Rule 461      Gasoline Transfer and Dispensing

### **REGULATION XI - SOURCE SPECIFIC STANDARDS**

Rule 1110.2   Emissions from Gaseous- and Liquid-Fueled Internal Combustion Engines  
Rule 1147      NOx Reductions from Miscellaneous Sources  
Rule 1176      Sumps and Wastewater Separators

### **REGULATION XIV – TOXICS**

Rule 1470      Requirements for Stationary Diesel-Fueled Internal Combustion and Other Ignition Engines

### **REGULATION XX - REGIONAL CLEAN AIR INCENTIVES MARKET (RECLAIM)**

Rule 2004      Requirements  
Rule 2011      Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (SOx) Emissions  
Rule 2012      Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NOx) Emissions

### **REGULATION XXX - TITLE V PERMITS**

Rule 3002      Requirements  
Rule 3003      Applications

### **CALIFORNIA HEALTH AND SAFETY CODE**

§41700      Prohibited Discharges

BOARD MEETING DATE: June 2, 2017

AGENDA NO. 14

REPORT: Civil Filings and Civil Penalties Report

SYNOPSIS: This reports the monthly penalties from April 1 through April 30, 2017, and legal actions filed the General Counsel's Office from April 1 through April 30, 2017. An Index of District Rules is attached with the penalty report.

COMMITTEE: Stationary Source, May 19, 2017, Reviewed

RECOMMENDED ACTION:  
Receive and file this report.

Kurt R. Wiese  
General Counsel

KRW:lc

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Violations

Civil Filings

3	PROCARE TREE SERVICE, INC. Los Angeles Superior Court Case No. BC657625; Filed: 4.18.17 (KCM) P61905, P61908 and P59847 R. 203 – Permit to Operate
1	J2 GLOBAL COMMUNICATIONS INC. Los Angeles Superior Court Case No. BC657755; Filed: 4.14.17 (NAS) P59370 R. 1470 - Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines
2 Cases	3 Violations

**Attachments**

April 2017 Penalty Reports

Index of District Rules and Regulations

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
General Counsel's Office**

**April 2017 Settlement Penalty Report**

<b><u>Total Penalties</u></b>	
Civil Settlements:	\$176,340.00
Self-Reported Settlements:	\$23,400.00
MSPAP Settlements:	\$41,885.00
 Total Cash Settlements:	 \$241,625.00
Total SEP Value:	\$0.00
 Fiscal Year through 4 / 2017 Cash Total:	 \$2,726,804.65
Fiscal Year through 4 / 2017 SEP Value Only Total:	\$10,500.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
<b>Civil Settlements</b>						
178133	A-CAL CONSTRUCTION SERVICES	1403	4/17/2017	KCM	P53993	\$4,500.00
164199	AMPCO CONTRACTING INC.	1403 40 CFR	4/24/2017	KCM	P61391	\$4,500.00
129949	ARCO AM/PM GLENDORA, LAKHBIR SONDH DBA	461	4/27/2017	DH	P64262	\$2,700.00
11174	BRONZEWAY PLATING CORP	1469 203	4/11/2017	KCM	P49176	\$1,500.00
94942	CANYON RIDGE HOSPITAL	1146.2	4/24/2017	NSF	P59407	\$1,000.00
178083	CAPRI AT SUNNY HILLS	1403	4/26/2017	KCM	P53992	\$7,500.00
155049	DOOR COMPONENTS	109, 203(b)	4/18/2017	MJR	P62011	\$1,000.00
124723	GREKA OIL & GAS, INC	203, 2006 2012 1176, 1178, 2004	4/3/2017	TRB	P55539 P55541 P55542	\$90,000.00
160190	JMDH REAL ESTATE OF COLTON, LLC	203 (a)	4/18/2017	RFL	P58083	\$2,000.00
88321	LA CO.,INTERNAL SER DIV, S F VLY JUV HAL	201, 1470 203 (a) 203(a), 1470	4/24/2017	NSF	P61231  P61246	\$20,000.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
176952	MERCEDES_BENZ WEST COAST CAMPUS	2004	4/3/2017	NSF	P60577	\$3,000.00
3665	METHODIST HOSPITAL OF SO CAL	1146 1470 203 (b)	4/18/2017	MJR	P61603	\$3,500.00
110450	NET SHAPES, INC.	1146.2 1147 1146.2 1147	4/5/2017	KCM	P59526  P59531	\$1,800.00
158448	O & C HILLSIDE RESOURCES MGMT CO	203 (a)	4/18/2017	MJR	P64315	\$500.00
144734	PACIFIC AUTOMOTIVE SERVICES, INC. Cash: \$590.00; Suspended: \$3,000.00 - for one year beginning 4/15/17 thru 4/15/18. If facility is found to be in avioation of any district rule or regulation within suspended period, they shall pay suspended penalty of \$3,000 within 30 days of written demand in addition to any civil penalty for the NOV triggering such payment.	203 (b), 461, 461(c)(2)(B) 461(c)(2)(B)	4/19/2017	MJR	P63124	\$3,590.00
177195	PACIFIC WEST FINANCIAL Civil Court Case Number BC654196	1403 1403	4/11/2017	KCM	P60156	\$3,750.00
45203	POLY PAK AMERICA INC	1147	4/3/2017	RFL	P62371	\$3,000.00
177621	PSW HAY, LLC	203 (a)	4/3/2017	MJR	P59713	\$2,500.00
171941	Q.E.P. INC.	3002(c)(1)	4/17/2017	NSF	P60873	\$2,500.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
148568	SOUTHWEST MILL & LUMBER	3002(c)(1)	4/19/2017	MJR	P61718	\$750.00
9720	STILES ANIMAL REMOVAL INC	402 41700	4/17/2017	KCM	P62754	\$1,500.00
2083	SUPERIOR INDUSTRIES INTERNATIONAL, INC	2004	4/10/2017	NSF	P60550	\$250.00
56	UNIVERSITY SO CALIFORNIA,HEALTH SCIENCES	1146.1 3002(c)(1)	4/17/2017	NSF	P60527	\$10,000.00
146536	WALNUT CREEK ENERGY, LLC	2004	4/17/2017	NSF	P64404	\$5,000.00
<b>Total Civil Settlements: \$176,340.00</b>						

#### Self-Reported Settlements

8574	SPECTROLAB INC	1147	4/5/2017	KCM	SRV2017-6	\$23,400.00
<b>Total Self-Reported Settlements: \$23,400.00</b>						

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
<b>MSPAP Settlements</b>						
2344	20TH CENTURY FOX FILM CORP	203	4/19/2017	GV	P63673	\$1,500.00
136967	AMERICAN GAS & FOOD MART	461	4/19/2017	JS	P63131	\$360.00
177975	APRO LLC DBA UNITED OIL #169	203 (b)	4/19/2017	JS	P64909	\$2,400.00
165878	AVALON ARCO & SN MART	41960.2 461(c) 461(c)(2)(B)	4/6/2017	GC	P64658	\$300.00
181202	CAPITAL READYMIX	203 (a)	4/19/2017	JS	P61730	\$1,500.00
183609	CHADMAR GROUP LLC_ROLLING HILLS COUNTRY	403	4/19/2017	JS	P64021	\$1,925.00
121107	CIRCLE K STORES INC, SITE #5802	461	4/26/2017	JS	P63132	\$2,000.00
157468	CR & R, INC.	203 (b)	4/19/2017	JS	P56740	\$1,500.00
180649	CVUSD _ DISTRICT COMMUNITY EDUCATION SUP	403.1	4/5/2017	JS	P64753	\$2,500.00
179636	DMJ OIL, INC	203 (b) 41960.2 461(c) 461(c)(2)(B)	4/6/2017	GC	P63046	\$2,400.00
82987	FABRIC CARE CLEANER	1421	4/6/2017	GC	P62912	\$450.00



Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
152386	JERRY'S AUTO SERVICE, INC	41960.2 461 461(c)(2)(B)	4/19/2017	GC	P64293	\$750.00
164149	K & C PACIFIC RIM, INC	41954 41960.2 461(c)(2)(B)	4/19/2017	GC	P64312	\$1,600.00
172481	METRO PCS	203 (a)	4/5/2017	TF	P62386	\$750.00
172482	METRO PCS	203 (a)	4/5/2017	TF	P62387	\$750.00
180585	NAGUA CAFE TRADICIONAL	201	4/19/2017	TF	P65507	\$50.00
57211	NATIONAL CLEANERS	1102	4/26/2017	TF	P64209	\$375.00
148614	NEWPORT LEXUS	203 (b)	4/6/2017	TF	P63607	\$3,000.00
183472	PARKWEST CONSTRUCTION CO	403.1	4/5/2017	JS	P64752	\$2,500.00
147863	RADC ENTERPRISES, SAN DIMAS SHELL	41960.2 461(c) 461(c)(2)(B)	4/19/2017	TF	P63123	\$800.00
115402	RAJ KUMAR MOBIL, RAJ KUMAR, DBA	203 (a) 461(E)(2)(A) 461(e)(2)(C)	4/19/2017	TF	P64959	\$375.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
122406	RITZ CLEANERS, KAYMEE SIN DBA	201 203 (a)	4/19/2017	TF	P60683	\$450.00
115011	S.V. HOLDING, INC, SANTA CLARITA MOBIL,	461(c)	4/19/2017	GC	P64901	\$425.00
73935	SB COUNTY, FACILITIES MGMT DEPT	203 (a)	4/5/2017	GV	P62043	\$1,400.00
167786	SPEEDIES DRY CLEANERS	1102 203	4/5/2017	GV	P64205	\$800.00
181526	STATE OF CALIFORNIA	203 (a)	4/6/2017	GV	P64153	\$1,600.00
183519	TECHTONEX CORP.	Title 13	4/6/2017	GV	P65352	\$600.00
175257	THE GASTRIBUTION INC.	461(E)(2)(A)	4/6/2017	GC	P61999	\$100.00
141133	VAIL RANCH CLEANERS	1402	4/6/2017	GV	P59681	\$500.00
159849	VISIONS PAINT RECYCLING INC.	314	4/5/2017	GV	P64811	\$6,400.00
183634	WILLIAMS PIPELINE CONTRACTORS, INC.	1166	4/19/2017	GV	P63367	\$1,600.00
164164	XTREAM AUTO BODY & PAINT	203	4/18/2017	GV	P64203	\$225.00

**Total MSPAP Settlements: \$41,885.00**

## **DISTRICT RULES AND REGULATIONS INDEX FOR APRIL 2017 PENALTY REPORTS**

### **REGULATION I - GENERAL PROVISIONS**

Rule 109      Recordkeeping for Volatile Organic Compound Emissions (*Amended 8/18/00*)

### **REGULATION II – PERMITS**

Rule 201      Permit to Construct (*Amended 1/5/90*)

Rule 203      Permit to Operate (*Amended 1/5/90*)

### **REGULATION IV - PROHIBITIONS**

Rule 402      Nuisance (*Adopted 5/7/76*)

Rule 403      Fugitive Dust (*Amended 12/11/98*) *Pertains to solid particulate matter emitted from man-made activities.*

Rule 403.1    Wind Entrainment of Fugitive Dust (*Amended 6/16/00*)

Rule 461      Gasoline Transfer and Dispensing (*Amended 6/15/01*)

### **REGULATION XI - SOURCE SPECIFIC STANDARDS**

Rule 1102    Petroleum Solvent Dry Cleaners (*Amended 11/17/00*)

Rule 1146    Emissions of Oxides of Nitrogen from Industrial, Institutional and Commercial Boilers, Steam Generators, and Process Heaters (*Amended 11/17/00*)

Rule 1146.1   Emissions of Oxides of Nitrogen from Small Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters (*Amended 5/13/94*)

Rule 1146.2   Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers (*Adopted 1/9/98*)

Rule 1147    Nox Reductions From Miscellaneous Sources

Rule 1176    Sumps and Wastewater Separators (*Amended 9/13/96*)

Rule 1178    Further Reductions of VOC Emissions from Storage Tanks at Petroleum Facilities (*Amended 4/7/06*)

## **REGULATION XIV – TOXICS**

- Rule 1402 Control of Toxic Air Contaminants from Existing Sources (*Amended 3/17/00*)
- Rule 1403 Asbestos Emissions from Demolition/Renovation Activities (*Amended 4/8/94*)
- Rule 1421 Control of Perchloroethylene Emissions from Dry Cleaning Operations (*Amended 6/13/97*)
- Rule 1470 Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines
- Rule 1469 Hexavalent Chromium Emissions From Chrome Plating and Chromic Acid Anodizing Operations (*Adopted 10/9/98*)
- Rule 1470 Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines

## **REGULATION XX - REGIONAL CLEAN AIR INCENTIVES MARKET (RECLAIM)**

- Rule 2004 Requirements (*Amended 5/11/01*)
- Rule 2006 Permits (*Amended 5/11/01*)
- Rule 2012 Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NO<sub>x</sub>) Emissions (*Amended 5/11/01*)

## **REGULATION XXX - TITLE V PERMITS**

- Rule 3002 Requirements (*Amended 11/14/97*)

## **CALIFORNIA HEALTH AND SAFETY CODE § 41700**

- 41700 Violation of General Limitations
- 41960.2 Gasoline Vapor Recovery
- 41954 Compliance for Control of Gasoline Vapor Emissions

## **CALIFORNIA CODE OF REGULATIONS**

- Title 13 Mobile Sources and Fuels

## **CODE OF FEDERAL REGULATIONS**

- 40 CFR – Protection of the Environment

BOARD MEETING DATE: June 2, 2017

AGENDA NO. 15

REPORT: Lead Agency Projects and Environmental Documents Received By SCAQMD

SYNOPSIS: This report provides, for the Board's consideration, a listing of CEQA documents received by the SCAQMD between April 1, 2017 and April 30, 2017, and those projects for which the SCAQMD is acting as lead agency pursuant to CEQA.

COMMITTEE: Mobile Source, May 19, 2017, Reviewed

RECOMMENDED ACTION:  
Receive and file.

Wayne Nastri  
Executive Officer

PF:SN:JW:LS:LW

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**CEQA Document Receipt and Review Logs (Attachments A and B)** – Each month, the SCAQMD receives numerous CEQA documents from other public agencies on projects that could adversely affect air quality. A listing of all documents received and reviewed during the reporting period April 1, 2017 through April 30, 2017 is included in Attachment A. A list of active projects from previous reporting periods for which SCAQMD staff is continuing to evaluate or has prepared comments is included in Attachment B. A total of 99 CEQA documents were received during this reporting period and 36 comment letters were sent. The notable projects in this report are the Remediation of Area IV and the Northern Buffer Zone of the Santa Susana Field Laboratory, and Berths 226-236 (Everport) Container Terminal Improvements Project.

The Intergovernmental Review function, which consists of reviewing and commenting on the adequacy of the air quality analysis in CEQA documents prepared by other lead agencies, is consistent with the Board's 1997 Environmental Justice Guiding Principles and Environmental Justice Initiative #4. Furthermore, as required by the Environmental Justice Program Enhancements for FY 2002-03 approved by the Board in October 2002, each of the attachments notes those proposed projects where the SCAQMD has been contacted regarding potential air quality-related environmental justice concerns. The SCAQMD has established an internal central contact to receive information on projects

with potential air quality-related environmental justice concerns. The public may contact the SCAQMD about projects of concern by the following means: in writing via fax, email, or standard letters; through telephone communication; as part of oral comments at SCAQMD meetings or other meetings where SCAQMD staff is present; or by submitting newspaper articles. The attachments also identify for each project the dates of the public comment period and the public hearing date, if applicable, as reported at the time the CEQA document is received by the SCAQMD. Interested parties should rely on the lead agencies themselves for definitive information regarding public comment periods and hearings as these dates are occasionally modified by the lead agency.

At the January 6, 2006 Board meeting, the Board approved the Workplan for the Chairman's Clean Port Initiatives. One action item of the Chairman's Initiatives was to prepare a monthly report describing CEQA documents for projects related to goods movement and to make full use of the process to ensure the air quality impacts of such projects are thoroughly mitigated. In response to describing goods movement, CEQA documents (Attachments A and B) are organized to group projects of interest into the following categories: goods movement projects; schools; landfills and wastewater projects; airports; and general land use projects, etc. In response to the mitigation component, guidance information on mitigation measures were compiled into a series of tables relative to: off-road engines; on-road engines; harbor craft; ocean-going vessels; locomotives; fugitive dust; and greenhouse gases. These mitigation measure tables are on the CEQA webpages portion of the SCAQMD's website. Staff will continue compiling tables of mitigation measures for other emission sources, including airport ground support equipment and other sources.

As resources permit, staff focuses on reviewing and preparing comments for projects: where the SCAQMD is a responsible agency; that may have significant adverse regional air quality impacts (e.g., special event centers, landfills, goods movement, etc.); that may have localized or toxic air quality impacts (e.g., warehouse and distribution centers); where environmental justice concerns have been raised; and those projects for which a lead or responsible agency has specifically requested SCAQMD review. If the SCAQMD staff provided written comments to the lead agency as noted in the column "Comment Status," there is a link to the "SCAQMD Letter" under the Project Description. In addition, if the SCAQMD staff testified at a hearing for the proposed project, a notation is provided under the "Comment Status." If there is no notation, then SCAQMD staff did not provide testimony at a hearing for the proposed project.

During the period April 1, 2017 through April 30, 2017, the SCAQMD received 99 CEQA documents. Of the total of 117 documents\* listed in Attachments A and B:

- 36 comment letters were sent;
- 22 documents were reviewed, but no comments were made;
- 30 documents are currently under review;
- 18 documents did not require comments (e.g., public notices, plot plans, Final Environmental Impact Reports);
- 0 documents were not reviewed; and
- 11 documents were screened without additional review.

\* These statistics are from April 1, 2017 to April 30, 2017 and may not include the most recent “Comment Status” updates in Attachments A and B.

Copies of all comment letters sent to lead agencies can be found on the SCAQMD’s CEQA webpage at the following internet address:

<http://www.aqmd.gov/home/regulations/ceqa/commenting-agency>.

**SCAQMD Lead Agency Projects (Attachment C)** – Pursuant to CEQA, the SCAQMD periodically acts as lead agency for stationary source permit projects. Under CEQA, the lead agency is responsible for determining the type of CEQA document to be prepared if the proposal is considered to be a “project” as defined by CEQA. For example, an Environmental Impact Report (EIR) is prepared when the SCAQMD, as lead agency, finds substantial evidence that the proposed project may have significant adverse effects on the environment. Similarly, a Negative Declaration (ND) or Mitigated Negative Declaration (MND) may be prepared if the SCAQMD determines that the proposed project will not generate significant adverse environmental impacts, or the impacts can be mitigated to less than significance. The ND and MND are written statements describing the reasons why proposed projects will not have a significant adverse effect on the environment and, therefore, do not require the preparation of an EIR.

Attachment C to this report summarizes the active projects for which the SCAQMD is lead agency and is currently preparing or has prepared environmental documentation. As noted in Attachment C, the SCAQMD continued working on the CEQA documents for three active projects during April.

#### **Attachments**

- A. Incoming CEQA Documents Log
- B. Ongoing Active Projects for Which SCAQMD Has or Will Conduct a CEQA Review
- C. Active SCAQMD Lead Agency Projects

**ATTACHMENT A\***  
**INCOMING CEQA DOCUMENTS LOG**  
**April 01, 2017 to April 30, 2017**

SCAQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<b>Goods Movement</b> <b>LAC170421-03</b> Berths 226-236 [Everport] Container Terminal Improvements Project	The proposed project consists of the dredging and disposal of 38,000 cubic yards of sediment, the structural improvements to stabilize the wharf, the raising of up to five existing cranes, the installation of five new cranes, the construction of vessel servicing infrastructure with five maritime power vaults, and the development of a 23.5-acre terminal backlands on 229 acres. The project is located on Terminal Island at Berths 226-236, on the west side of Terminal Island along the Main Channel and near the Main Channel Turning Basin in the Port of Los Angeles. Reference LAC141231-05  Comment Period: 4/21/2017 - 6/5/2017 Public Hearing: 5/10/2017	Draft Environmental Impact Statement/ Environmental Impact Report	City of Los Angeles Harbor Department	Under review, may submit written comments
<b>Warehouse &amp; Distribution Centers</b> <b>SBC170404-06</b> Western Realco Bloomington Industrial Facility	The proposed project consists of the construction of a 676,983-square-foot distribution warehouse building on 34.54 acres. The project is located on the northwest corner of Cedar Avenue and Jurupa Avenue in the community of Bloomington. Reference SBC161227-04 and SBC160325-02  Comment Period: N/A Public Hearing: N/A	Final Environmental Impact Report	County of San Bernardino	Document reviewed - No comments sent
<b>Warehouse &amp; Distribution Centers</b> <b>SBC170406-06</b> Pacific Freeway Center	The proposed project consists of the construction and operation of two warehouse buildings totaling 522,000 square feet on 26.62 acres. The project is located at 10829 Etiwanda Avenue, on the southeast corner of Interstate 10 and Etiwanda Avenue.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-pacificfreeway-042017.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-pacificfreeway-042017.pdf</a>  Comment Period: 4/7/2017 - 5/8/2017 Public Hearing: 4/24/2017	Notice of Preparation	City of Fontana	SCAQMD staff commented on 4/20/2017
<b>Warehouse &amp; Distribution Centers</b> <b>SBC170425-07</b> Design Review DRC2016-00670, Specific Plan Amendment DRC2016- 00931, and Tree Removal Permit DRC2016-00671	The proposed project consists of the construction of a 232,058-square-foot warehouse logistic building on 11.84 acres. The project is located on the northeast corner of 4th Street and Utica Avenue.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/mnd-drc201600670-052417.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/mnd-drc201600670-052417.pdf</a>  Comment Period: 4/20/2017 - 5/24/2017 Public Hearing: 5/24/2017	Mitigated Negative Declaration	City of Rancho Cucamonga	SCAQMD staff commented on 5/24/2017

*\*Sorted by Land Use Type (in order of land uses most commonly associated with air quality impacts), followed by County, then date received.*

# - Project has potential environmental justice concerns due to the nature and/or location of the project.

Documents received by the CEQA Intergovernmental Review program but not requiring review are not included in this report.



**ATTACHMENT A**  
**INCOMING CEQA DOCUMENTS LOG**  
**April 01, 2017 to April 30, 2017**

SCAQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<i>Airports</i> <b>LAC170421-04</b> Los Angeles International Airport (LAX) Secured Area Access Post Project	The proposed project consists of the demolition of a vacant office building, and the construction of a new Secured Area Access Post with two canopy structures and two 350-square-foot guard station buildings on 4.1 acres. The project is located on the southeast corner of World Way West and Pershing Drive.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-laxsecuredarea-051217.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-laxsecuredarea-051217.pdf</a>  Comment Period: 4/20/2017 - 5/22/2017 Public Hearing: N/A	Notice of Preparation	Los Angeles World Airports	SCAQMD staff commented on 5/12/2017
<i>Industrial and Commercial</i> <b>LAC170427-03</b> ENV-2016-1209: 12575 Beatrice St. (12553-12575 W. Beatrice St., 5410- 5454 S. Jandy Pl.)	The proposed project consists of the demolition of an existing 23,072-square-foot office building, and the construction of a new 199,500-square-foot office building with two levels of subterranean parking on 2.37 acres. The project is located on the northeast corner of Jandy Place and Beatrice Street in the community of Palms-Mar Vista-Del Rey.  Comment Period: 4/27/2017 - 5/17/2017 Public Hearing: N/A	Mitigated Negative Declaration	City of Los Angeles	Document reviewed - No comments sent
<i>Industrial and Commercial</i> <b>ORC170405-02</b> Freeway-Oriented Signage for The Outlets at San Clemente	The document is the notice of scoping meeting for the proposed project. The proposed project consists of the mounting of 36 freeway signs on buildings. The project is located at 101 West Avenida Vista Hermosa on the northeast corner of West Avenida Vista Hermosa and East Avenida Pico. Reference ORC170330-09  Comment Period: N/A Public Hearing: 4/13/2017	Notice of Public Hearing	City of San Clemente	Document does not require comments
<i>Industrial and Commercial</i> <b>RVC170406-07</b> Heritage Square Revision (CUP 2017- 089)	The proposed project consists of the construction of a 152,893-square-foot commercial center on 18.1 acres. The project is located on the northwest corner of Menifee Road and McCall Boulevard. Reference RVC100511-02  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/sp-heritagesquare-042017.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/sp-heritagesquare-042017.pdf</a>  Comment Period: 4/6/2017 - 4/27/2017 Public Hearing: N/A	Site Plan	City of Menifee	SCAQMD staff commented on 4/20/2017

# - Project has potential environmental justice concerns due to the nature and/or location of the project. Documents received by the CEQA Intergovernmental Review program but not requiring review are not included in this report.

**ATTACHMENT A**  
**INCOMING CEQA DOCUMENTS LOG**  
**April 01, 2017 to April 30, 2017**

SCAQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<b>Industrial and Commercial</b> <b>RVC170425-04</b> Rubidoux Commercial Development Project (City Case No. MA15146)	The proposed project consists of the construction of nine industrial buildings with 306,894 square feet on 26.4 acres. The project is located on the northwest corner of 20th Street and Vandell Road. Reference RVC151113-01  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-rubidoux-051217.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-rubidoux-051217.pdf</a>  Comment Period: 4/21/2017 - 5/22/2017 Public Hearing: 5/3/2017	Notice of Preparation	City of Jurupa Valley	SCAQMD staff commented on 5/12/2017
<b>Industrial and Commercial</b> <b>SBC170425-05</b> PL16-0412 (Site Approval), PL16-0410 (Tentative Parcel Map No 19749), and PL16-0411, PL16-0415 and PL16-0417 (Special Conditional Use Permits)	The proposed project consists of the construction of a 10,905-square-foot commercial center on 3.21 acres. The project is located on the northwest corner of Pine Avenue and Mill Creek Avenue. Reference SBC161129-09  Comment Period: 4/23/2017 - 5/2/2017 Public Hearing: 5/2/2017	Notice of Public Hearing	City of Chino	Document does not require comments
<b>Waste and Water-related</b> <b>LAC170404-07</b> South Gate Educational Center	The proposed project consists of the clean up of hydrocarbon-contaminated soil on 18.5 acres as part of the development of a new campus. The project will excavate, test, remove, and dispose the contaminated soil at an off-site state permitted facility. The project is located at 2525 Firestone Boulevard on the northwest corner of Firestone Boulevard and Santa Fe Avenue in the City of South Gate. Reference LAC160531-10 <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/raw-sgeducationalcenter-042817.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/raw-sgeducationalcenter-042817.pdf</a>  Comment Period: 3/30/2017 - 5/1/2017 Public Hearing: 4/12/2017	Draft Remediation Plan	Department of Toxic Substances Control	SCAQMD staff commented on 4/28/2017
<b>Waste and Water-related</b> <b>LAC170407-01</b> Former Crown Beverage Packaging Company, Inc.	The proposed project consists of a corrective action remedy to clean up the contaminated soils with petroleum hydrocarbons at the former aluminum-can manufacturing facility. The project consists of monitoring, institutional control, and financial assurance. The project is located at 8201 Woodley Avenue on the southwest corner of Woodley Avenue and Roscoe Boulevard in the community of Van Nuys of the City of Los Angeles.  Comment Period: 4/10/2017 - 5/9/2017 Public Hearing: N/A	Notice of Exemption	Department of Toxic Substances Control	Document does not require comments

# - Project has potential environmental justice concerns due to the nature and/or location of the project. Documents received by the CEQA Intergovernmental Review program but not requiring review are not included in this report.

**ATTACHMENT A**  
**INCOMING CEQA DOCUMENTS LOG**  
**April 01, 2017 to April 30, 2017**

<u>SCAQMD LOG-IN NUMBER</u>	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
PROJECT TITLE				
<i><b>Waste and Water-related</b></i>	The proposed project consists of the modifications to DeMenno-Kerdoon's permit for tanks used for recovered oil and intermediate waste stream (oil), as well as other administrative and informational changes and corrections of typographical errors. The project is located at 2000 North Alameda Street on the southeast corner of Alameda Street and East Pine Street in the City of Compton.	Permit Modification	Department of Toxic Substances Control	Document does not require comments
<b>LAC170407-05</b> DeMenno-Kerdoon Public Notice of Class 1 Permit Modification	Comment Period: N/A  Public Hearing: N/A			
<i><b>Waste and Water-related</b></i>	The proposed project consists of a Phase III Groundwater Remedial Action Plan to clean up volatile organic compounds in the groundwater underlying the 122-acre former Athens Tank Farm located on the southeast corner of East 120 Street and Avalon Boulevard in the Willowbrook area of Los Angeles County. Reference LAC130328-03	Draft Remediation Plan	Department of Toxic Substances Control	Document does not require comments
<b>LAC170412-01</b> Former Athens Tank Farm Site, Willowbrook	Comment Period: 4/13/2017 - 5/13/2017  Public Hearing: 4/29/2017			
<i><b>Waste and Water-related</b></i>	The proposed project consists of the installation of wells to clean up the contaminated groundwater underneath the site located at 644 East 56th Street on the southeast corner of 56th Street and South Avalon Boulevard in the City of Los Angeles.	Draft Remediation Plan	Department of Toxic Substances Control	Document reviewed - No comments sent
<b>LAC170418-01</b> Los Angeles Academy Middle School	Comment Period: 4/13/2017 - 5/12/2017  Public Hearing: 4/27/2017			
<i><b>Waste and Water-related</b></i>	The proposed project consists of the construction of an underground stormwater storage facility with a capacity of 17 acre-feet, a storm drain diversion system with an intake of 30 cubic feet, pretreatment devices, a dewatering system, and a return pipeline on 1.5 acres. The project is located at 23800 Figueroa Street on the northeast corner of West Sepulveda Boulevard and South Figueroa Street.	Negative Declaration	City of Carson	Document reviewed - No comments sent
<b>LAC170425-09</b> Carson Stormwater and Runoff Capture Project	Comment Period: 4/25/2017 - 5/24/2017  Public Hearing: N/A			

# - Project has potential environmental justice concerns due to the nature and/or location of the project. Documents received by the CEQA Intergovernmental Review program but not requiring review are not included in this report.

**ATTACHMENT A**  
**INCOMING CEQA DOCUMENTS LOG**  
**April 01, 2017 to April 30, 2017**

SCAQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<b>Waste and Water-related</b> <b>LAC170426-03</b> Remediation Plan for the Mariner Parcel A Site (Former Dow Chemical Plant)	The proposed project consists of the capping of soil with elevated concentrations of arsenic on 4.75 acres of the 28-acre site. The project is located at 19500 Mariner Avenue and 19200 Hawthorne Boulevard on the northwest corner of Mariner Avenue and Voyager Street in the City of Torrance.  Comment Period: 4/20/2017 - 5/20/2017 Public Hearing: N/A	Draft Remediation Plan	Department of Toxic Substances Control	Document does not require comments
<b>Waste and Water-related</b> <b>ODP170405-01</b> Remediation of Area IV and the Northern Buffer Zone of the Santa Susana Field Laboratory (Draft SSFL Area IV EIS) (DOE/EIS-0402)	The proposed project consists of the remediation of contaminated soil and groundwater, the removal of existing facilities, and the restoration of Area IV on 290 acres that are located within the 2,850-acre Santa Susana Field Laboratory. The project is located on the southeast corner of Service Area Road and Woolsey Canyon Road in Ventura County.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/deis-santasusana-041217.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/deis-santasusana-041217.pdf</a>  Comment Period: 1/17/2017 - 4/13/2017 Public Hearing: 2/18/2017	Draft Environmental Impact Statement	United States Department of Energy	SCAQMD staff commented on 4/12/2017
<b>Waste and Water-related</b> <b>ODP170420-07</b> Santa Susana Field Laboratory (SSFL)	The notice consists of a community meeting to provide updates on the proposed project. The proposed project consists of the remediation of contamination within the 2,850-acre Santa Susana Field Laboratory. The project is located on the southeast corner of Service Area Road and Woolsey Canyon Road in Ventura County. Reference ODP170405-01  Comment Period: N/A Public Hearing: 5/2/2017	Community Notice	Department of Toxic Substances Control	Document does not require comments
<b>Waste and Water-related</b> <b>RVC170405-03</b> Highway 86 Domestic Water Transmission Main Phase 2 and Pump Station	The document is a notice to advice that the proposed project was approved on March 28, 2017. The project consists of the modifications to the 30-inch water transmission pipeline alignment at two locations between Avenues 82 and 83 to travel south along Lincoln Street to Avenue 86. The project is located along Harrison Street from Avenue 74 south to Avenue 86 in Coachella Valley. Reference RVC170301-04  Comment Period: N/A Public Hearing: N/A	Notice of Determination/ Addendum to a Mitigated Negative Declaration	Coachella Valley Water District	Document does not require comments

# - Project has potential environmental justice concerns due to the nature and/or location of the project. Documents received by the CEQA Intergovernmental Review program but not requiring review are not included in this report.

**ATTACHMENT A**  
**INCOMING CEQA DOCUMENTS LOG**  
**April 01, 2017 to April 30, 2017**

SCAQMD LOG-IN NUMBER	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
PROJECT TITLE				
<b>Waste and Water-related</b>	This document consists of responses to the SCAQMD staff comments on the Draft Environmental Impact Report for the proposed project. The proposed project consists of administrative and operational changes at Coachella Valley Compost, including 1) the increase of the leased area by 4.5 acres, 2) increase of organic material supply from 250 tons per day (tpd) to 785 tpd, 3) increase of construction materials processing up to 200 tpd, 4) increase of grease trap liquids from 12,500 gallons per day (gpd) to 55,000 gpd, and 5) addition of animal manure to the list of feedstock. The project is located at 87-011 Landfill Road on the southeast corner of Polk Street and Landfill Road in the City of Coachella. Reference RVC150113-12, RVC131024-04 and RVC130808-03	Final Environmental Impact Report	Riverside County Department of Waste Resources	Document reviewed - No comments sent
<b>RVC170425-01</b> Solid Waste Facility Permit Revision for Coachella Valley Compost				
	Comment Period: N/A Public Hearing: 5/23/2017			
<b>Waste and Water-related</b>	The proposed project consists of the phased installation of an underground reinforced concrete pipe and a concrete box structure to collect and convey the drainage flows of 704 tributary acres under a 100-year flood event. The project is located along Third Street within the Santa Ana River Basin and the Riverside County Flood Control and Water Conservation District Zone 3 watershed near the southeast corner of Crane Street and Collier Avenue.	Notice of Public Hearing	City of Lake Elsinore	Document reviewed - No comments sent
<b>RVC170425-11</b> Third Street Storm Drain Project				
	Comment Period: 4/19/2017 - 5/19/2017 Public Hearing: 5/23/2017			
<b>Waste and Water-related</b>	The proposed project consists of the improvement to an existing interim dirt-lined trapezoidal flood control channel with concrete across Valley View Avenue and Sierra Avenue, and the construction of a rock-lined invert, storm drain lines, inlets, and catch basins. The project is located on the northwest corner of Fourth Street and Corona Avenue in the City of Norco.	Notice of Intent to Adopt a Mitigated Negative Declaration	Riverside County Flood Control and Water Conservation District	Document reviewed - No comments sent
<b>RVC170426-09</b> North Norco Channel Line NB, Stage 3				
	Comment Period: 4/27/2017 - 5/29/2017 Public Hearing: N/A			
<b>Utilities</b>	The notice consists of a public site visit, environmental scoping meeting, and informational hearing on the proposed project. The proposed project consists of the construction of a 98-megawatt hybrid electrical generating and battery energy storage facility with two gas turbines on four acres. The project is located at 10711 Dale Avenue on the southeast corner of Pacific Street and Fern Avenue in the City of Stanton.	Community Notice	California Energy Commission	Document does not require comments
<b>ORC170421-02</b> Stanton Energy Reliability Center				
	Comment Period: N/A Public Hearing: 4/17/2017			

# - Project has potential environmental justice concerns due to the nature and/or location of the project. Documents received by the CEQA Intergovernmental Review program but not requiring review are not included in this report.

**ATTACHMENT A**  
**INCOMING CEQA DOCUMENTS LOG**  
**April 01, 2017 to April 30, 2017**

<u>SCAQMD LOG-IN NUMBER</u>	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
PROJECT TITLE				
<i>Utilities</i> <b>RVC170420-04</b> Newcomb Substation Cell Tower (AT&T Mobility) (CUP 2017-101)	The proposed project consists of the installation of a new wireless communication facility as a 60-foot monopine with 12.8 feet antennas, supporting equipment, and a prefab shelter. The project is located on the northeast corner of Murrieta Road and Newport Road.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/sp-newcombcelltower-042617.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/sp-newcombcelltower-042617.pdf</a>  Comment Period: 4/12/2017 - 5/4/2017                      Public Hearing: N/A	Site Plan	City of Menifee	SCAQMD staff commented on 4/26/2017
<i>Utilities</i> <b>RVC170425-03</b> Temporary Use Permit No. 2017-113 (TUP 2017-113)	The proposed project consists of the construction of a temporary lay down and utility material yard. The project is located on the northeast corner of Palomar Road and Rouse Road.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/sp-permitno2017113-050517.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/sp-permitno2017113-050517.pdf</a>  Comment Period: 4/25/2017 - 5/15/2017                      Public Hearing: N/A	Site Plan	City of Menifee	SCAQMD staff commented on 5/5/2017
<i>Utilities</i> <b>SBC170411-05</b> Laser Radio Broadcasting Facility (P201000215)	The proposed project consists of the construction of a radio broadcast facility to include a 43-foot tall monopole and a 100-square-foot equipment shelter on 38.12 acres. The project is located on the west side of Pisgah Peak Road, approximately 1.5 miles north of Wildwood Canyon in the community of Oak Glen. Reference SBC141104-01 <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/laserradiobroadcasting-041417.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/laserradiobroadcasting-041417.pdf</a>  Comment Period: N/A                      Public Hearing: 4/18/2017	Notice of Public Hearing	San Bernardino County	SCAQMD staff commented on 4/14/2017
<i>Transportation</i> <b>LAC170406-05</b> Paseo Del Mar Permanent Restoration Project	The proposed project consists of the restoration of a 400-foot-long section along the Paseo Del Mar roadway that is located on the northwest corner of Paseo Del Mar and West Weymouth Avenue in the community of San Pedro. Reference LAC161006-04  Comment Period: 4/6/2017 - 6/5/2017                      Public Hearing: 5/3/2017	Draft Environmental Impact Report	City of Los Angeles	Document reviewed - No comments sent

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SCAQMD LOG-IN NUMBER	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
PROJECT TITLE				
<b>Transportation</b>	The proposed project consists of the removal of 3.2 miles of original concrete curbs and gutters. The project is located along State Route 110 between Grand Avenue and Highway 101. Reference LAC160809-05  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/deir-sr110safety-051917.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/deir-sr110safety-051917.pdf</a>	Draft Environmental Impact Report/ Environmental Assessment	California Department of Transportation	SCAQMD staff commented on 5/19/2017
<b>LAC170421-05</b> State Route 110 (SR-110) Safety Enhancement Project				
	Comment Period: 4/4/2017 - 5/22/2017	Public Hearing: N/A		
<b>Transportation</b>	The proposed project consists of the removal and recycling of existing asphalt and the addition of on-street bike lanes on Alamitos Avenue between 7th Street and Ocean Boulevard on 4.7 acres.	Draft Environmental Impact Report	City of Long Beach	Document reviewed - No comments sent
<b>LAC170425-06</b> Alamitos Avenue "Complete Streets" Improvements Project				
	Comment Period: 4/19/2017 - 6/5/2017	Public Hearing: N/A		
<b>Transportation</b>	The proposed project consists of the widening of State Route 55 (SR-55) in both directions from just north of the Interstate 405 (I-405)/SR-55 Interchange to just south of the Interstate 5 (I-5)/SR-55 Interchange between Post Miles 6.4 and 10.3, traversing the cities of Santa Ana, Tustin, and Irvine in Orange County. Reference ORC151202-01  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/mnd-sr55-042817.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/mnd-sr55-042817.pdf</a>	Mitigated Negative Declaration	California Department of Transportation	SCAQMD staff commented on 4/28/2017
<b>ORC170404-02</b> State Route 55 (SR-55) Improvement Project Between Interstate 405 (I-405) and Interstate 5 (I-5)				
	Comment Period: 4/3/2017 - 5/3/2017	Public Hearing: 4/20/2017		
<b>Transportation</b>	This document consists of responses to the SCAQMD staff comments on the Mitigated Negative Declaration for the proposed project. The proposed project consists of a safety project along a portion of State Route 22 from Beach Boulevard to the connector with Interstate 5/State Route 57 by removing a portion of the existing collector-distributor road concrete barrier and relocating the point of divergence further eastward to the North Bristol Street interchange, reconfiguring the eastbound SR-22 mainline freeway, and widening the State Route 22 eastbound connector to northbound I-5/northbound State Route 57 to add one lane. Reference ORC170117-09	Responses to Comments	California Department of Transportation	Document reviewed - No comments sent
<b>ORC170411-14</b> Eastbound SR-22				
	Comment Period: 4/5/2017 - 4/15/2017	Public Hearing: N/A		

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<b>Transportation</b> <b>ORC170419-02</b> OC Loop Carbon Creek Channel Bikeway Gap Closure Segment D (File No. IP 16-343)	The proposed project consists of the development of a regional, one-mile bikeway with Class I and Class IV alignments. The project starts from La Floresta Drive and ends at Bastanchury Road near the borders of the cities of Brea, Placentia, and Yorba Linda.  Comment Period: 4/13/2017 - 5/15/2017      Public Hearing: 6/27/2017	Mitigated Negative Declaration	County of Orange	Document reviewed - No comments sent
<b>Institutional (schools, government, etc.)</b> <b>LAC170413-04</b> Mt. San Antonio Physical Education Project (Phase 1, 2)	The proposed project consists of two development phases on 32 acres. Phase 1 would include the demolition of 43,240 square feet of existing facilities and the construction of a track and field with nine lanes and 10,912 permanent seats. Phase 1 would also include the construction of five athletic track fields, 6.9 acres of landscaping, and two interior pedestrian bridges to provide access to the aesthetic fields. Phase 2 of the project consists of the construction of a 117,898-square-foot building, rooftop bleachers with 2,800 seats, and a 50-meter swimming and diving pool. Phase 2 would total 87,167 square feet. The project is located on the southeast corner of Bonita Avenue and Temple Avenue in the City of Walnut. Reference LAC160930-04, LAC160610-04 and LAC160115-01 <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-mtsacphysicaledu-050517.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-mtsacphysicaledu-050517.pdf</a>  Comment Period: 4/13/2017 - 5/12/2017      Public Hearing: N/A	Notice of Preparation	Mt. San Antonio Community College District	SCAQMD staff commented on 5/5/2017
<b>Institutional (schools, government, etc.)</b> <b>LAC170413-06</b> International Studies Learning Center Addition Project	The proposed project consists of the demolition of 17 classrooms in portable buildings and the construction of 16 permanent classrooms with supporting facilities and amenities on 4.9 acres. The project is located at 5225 Tweedy Boulevard on the southwest corner of Tweedy Boulevard and Adella Avenue in the City of South Gate. Reference LAC160705-18  Comment Period: 4/10/2017 - 5/24/2017      Public Hearing: 4/27/2017	Draft Environmental Impact Report	Los Angeles Unified School District	Document reviewed - No comments sent
<b>Institutional (schools, government, etc.)</b> <b>ORC170411-02</b> Concordia University Conditional Use Permit Modification	The proposed project consists of a Zone Change to modify the Special Development Requirements in Zoning Ordinance Section 9-21-7 associated with a Conditional Use Permit Modification to update its previously approved campus build-out plan. The project is located at 1530 Concordia West on the southwest corner of Ridgeline Drive and University Drive. Reference ORC170303-03, ORC160802-04 and ORC150911-01  Comment Period: 4/11/2017 - 4/25/2017      Public Hearing: 4/25/2017	Notice of Public Hearing	City of Irvine	Document does not require comments

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<i>Institutional (schools, government, etc.)</i> <b>ORC170414-05</b> Naval Weapons Station Seal Beach Ammunition Pier and Turning Basin	The proposed project consists of the construction of a 1,100-foot by 125-foot replacement ammunition pier, associated waterfront facilities, causeway, truck turnaround, and public navigational channel. The project is located in Anaheim Bay and along Pacific Coast Highway in the City of Seal Beach. Reference ORC160407-07  Comment Period: 4/14/2017 - 5/30/2017      Public Hearing: 5/16/2017	Environmental Assessment	United States Department of the Navy	Under review, may submit written comments
<i>Medical Facility</i> <b>LAC170411-11</b> Providence Saint John's Health Center Phase II Project	The proposed project consists of the demolition of existing medical buildings and a vacant building with 10 residential units, and the construction of 10 new medical buildings, 10 residential apartment units, and three new access streets on 5.17 acres. The project is located on the campus of Providence Saint John's Health Center on the southeast corner of Arizona Avenue and 20th street. <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-providencestjohns-042817.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-providencestjohns-042817.pdf</a>  Comment Period: 4/11/2017 - 5/11/2017      Public Hearing: 4/24/2017	Notice of Preparation	City of Santa Monica	SCAQMD staff commented on 4/28/2017
<i>Medical Facility</i> <b>LAC170411-13</b> 923-931 North Palm Avenue Senior Congregate Care Facility Project	The proposed project consists of the demolition of three existing residential units and two detached garages, and the construction of a four-story, senior care facility building with 49 units and subterranean parking on 0.44 acres. The project is located on the northwest corner of Palm Avenue and Cynthia Street. <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nd-seniorcongregate-042017.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nd-seniorcongregate-042017.pdf</a>  Comment Period: 4/6/2017 - 4/26/2017      Public Hearing: N/A	Negative Declaration	City of West Hollywood	SCAQMD staff commented on 4/20/2017
<i>Medical Facility</i> <b>RVC170425-08</b> Monterey Medical Center	The proposed project consists of the construction of 12 medical office buildings totaling 75,164 square feet on 9.2 acres. The project is located on the northeast corner of Monterey Avenue and Gerald Ford Drive.  Comment Period: 4/21/2017 - 5/22/2017      Public Hearing: N/A	Mitigated Negative Declaration	City of Rancho Mirage	Document reviewed - No comments sent

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<b>Retail</b> <b>LAC170406-03</b> ENV-2016-2458: 8001 W. Beverly Blvd. (8001-8015 W. Beverly Blvd. & 311-315 N. Edinburgh Ave.) & 7967 W. Beverly Blvd.	The proposed project consists of the demolition of 11,300-square-foot commercial space and a 2,700-square-foot surface parking lot, and the construction of a 24,725-square-foot restaurant and 11,260 square feet of office space. The project is located north of Beverly Boulevard between North Hayworth Avenue and North Laurel Avenue in the community of Wilshire.	Mitigated Negative Declaration	City of Los Angeles	Document reviewed - No comments sent
	Comment Period: 4/6/2017 - 4/26/2017 Public Hearing: N/A			
<b>Retail</b> <b>LAC170411-01</b> Hampton Inn/Homewood Inn and Suites (Master Case No. 15-135)	The proposed project consists of the construction of a five-story, 124,000-square-foot hotel with 185 rooms. The project is located south of Newhall Ranch Road between West Rye Canyon and Vanderbilt Way.	Mitigated Negative Declaration	City of Santa Clarita	Document reviewed - No comments sent
	Comment Period: 3/28/2017 - 4/18/2017 Public Hearing: 4/18/2017			
<b>Retail</b> <b>LAC170413-01</b> ENV-2016-2858: 11331 W. Osborne St.	The proposed project consists of the construction, use, and maintenance of a new gas station with 8 pumps and a 2,940-square-foot convenience store. The project is located on the northeast corner of Foothill Boulevard and Osborne Street in the community of Sunland-Tujunga-Lake View Terrace-Shadow Hills-East La Tuna Canyon.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/mnd-11331wosborne-042817.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/mnd-11331wosborne-042817.pdf</a>	Mitigated Negative Declaration	City of Los Angeles	SCAQMD staff commented on 4/28/2017
	Comment Period: 4/13/2017 - 5/3/2017 Public Hearing: N/A			
<b>Retail</b> <b>LAC170427-04</b> ENV-2016-5002: 20504, 20524 Lassen Ave. & 9805, 9825, 9829, 9833, 935, 9837, 9839, 9841, 9843, 9845, 9847, 9849, 9851, 9853, 9855, 9857 Mason Ave.	The proposed project consists of the demolition of 23,820 square feet of retail uses, a 1,032-square-foot automobile care center, and a 1,606-square-foot residential unit, and the construction of a 87,521-square-foot hotel with 124 rooms. The project also includes the reuse of 16,845 square feet of existing retail structures as new retail land uses, and the reuse of a 19,569-square-foot building for a new fitness center. The project is located on the southwest corner of Lassen Street and Mason Avenue in the community of Chatsworth-Porter Ranch.	Mitigated Negative Declaration	City of Los Angeles	Document reviewed - No comments sent
	Comment Period: 4/27/2017 - 5/17/2017 Public Hearing: N/A			

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<b>Retail</b> <b>RVC170404-05</b> Walmart on McCall Blvd. (Plot Plan No. 2012-122 and Tentative Parcel Map No. 212-121)	The proposed project consists of the construction of a 218,135-square-foot shopping center on 25.19 acres. The project is located on the southeast corner of Encanto Drive and Shadel Road. Reference RVC140422-03  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/sp-walmartonmccall-042017.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/sp-walmartonmccall-042017.pdf</a>  Comment Period: 4/3/2017 - 4/28/2017 Public Hearing: N/A	Site Plan	City of Menifee	SCAQMD staff commented on 4/20/2017
<b>Retail</b> <b>RVC170407-03</b> MA16175 (SDP16014)	The proposed project consists of the construction of a 4,702-square-foot building that includes a drive-through car wash with an office and an equipment room on 0.78 acres. The project is located at 6168 Etiwanda Avenue on the northeast corner of Limonite Avenue and Etiwanda Avenue. Reference RVC161025-10  Comment Period: 4/4/2017 - 4/24/2017 Public Hearing: 4/25/2017	Mitigated Negative Declaration	City of Jurupa Valley	Document reviewed - No comments sent
<b>Retail</b> <b>RVC170414-01</b> Eastvale Crossings Project	The document consists of responses to the SCAQMD staff comments on the Draft Environmental Impact Report for the proposed project. The proposed project consists of the construction of a 192,000-square-foot retail center, a gasoline station with 16 fueling pumps, a 4,200-square-foot convenience store, a 3,500-square-foot drive-through fast-food restaurant, a 6,200-square-foot drive-through retail shop, a 12,200-square-foot retail building, and a storm water retention basin on 24.78 acres. The project is located on the southwest corner of Limonite Avenue and Archibald Avenue. Reference RVC160929-04 and RVC150120-04  Comment Period: N/A Public Hearing: 4/26/2017	Response to Comments	City of Eastvale	Document reviewed - No comments sent
<b>Retail</b> <b>SBC170405-04</b> Costco Wholesale Gas Station Relocation and Expansion Project	The proposed project consists of the relocation of a Costco gas station from its current location in a parking lot to the south of the same parking lot. The project would also include the expansion from 12 fuel pumps to 18 fuel pumps and the construction of a 5,520-square-foot canopy on 11.74 acres. The project is located at 13111 Peyton Drive on the northeast corner of Peyton Drive and Chino Avenue. <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/mnd-costcochinohills-041917.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/mnd-costcochinohills-041917.pdf</a>  Comment Period: 4/5/2017 - 4/25/2017 Public Hearing: 5/2/2017	Mitigated Negative Declaration	City of Chino Hills	SCAQMD staff commented on 4/19/2017

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PROJECT TITLE				
<b>Retail</b>	The proposed project consists of the construction of a 32,677-square-foot gas station on 0.78 acres. The project is located on the southeast corner of Scenic Drive and Inland Center Drive.	Mitigated Negative Declaration	City of San Bernardino	SCAQMD staff commented on 5/24/2017
<b>SBC170426-06</b> Inland Center Gas Station Project	<a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/mnd-inlandcenter-052417.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/mnd-inlandcenter-052417.pdf</a>  Comment Period: 4/24/2017 - 5/24/2017 Public Hearing: 6/13/2017			
<b>General Land Use (residential, etc.)</b>	The proposed project consists of the demolition of a two-story, 91,000-square-foot industrial structure, and the construction of a 12-story, mixed-use development with 129 dwelling units, 113 hotel rooms, 72,469 square feet of commercial space, and subterranean parking on 1.05 acres. The project is located on the southeast corner of East 4th Street and South Alameda Street in the Central City North community.	Notice of Preparation	City of Los Angeles	SCAQMD staff commented on 4/20/2017
<b>LAC170404-01</b> Arts District Center (ENV-2016-4475-EIR)	<a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-artsdistrictcenter-042017.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-artsdistrictcenter-042017.pdf</a>  Comment Period: 4/1/2017 - 5/1/2017 Public Hearing: 4/20/2017			
<b>General Land Use (residential, etc.)</b>	The proposed project consists of the demolition of a 8,021-square-foot commercial theatre and the construction of a three-story, 22-unit residential building on 0.97 acres. The project is located on the southeast corner of Workman Street and Glendora Avenue.	Site Plan	City of La Puente	SCAQMD staff commented on 4/12/2017
<b>LAC170404-04</b> Tentative Track Map No. 74920	<a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/sp-ttm74920-041217.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/sp-ttm74920-041217.pdf</a>  Comment Period: 3/30/2017 - 4/13/2017 Public Hearing: 4/13/2017			
<b>General Land Use (residential, etc.)</b>	The proposed project consists of the construction of 42 single-family residential units on 218,270 square feet. The project is located on the south corner of Eastern Avenue and Lombardy Boulevard in the community of Northeast Los Angeles. Reference LAC160512-11	Mitigated Negative Declaration	City of Los Angeles	Document reviewed - No comments sent
<b>LAC170406-02</b> ENV-2015-1918: 2520, 2532, 2608, 2668 N. Eastern Ave. & 2647, 2649, 2651 Lombardy Blvd.	Comment Period: 4/16/2017 - 4/26/2017 Public Hearing: N/A			

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PROJECT TITLE				
<i>General Land Use (residential, etc.)</i> <b>LAC170407-02</b> The ICON at Panorama (ENV-2016-1061-EIR)	The proposed project consists of the demolition of three commercial buildings totaling 172,500 square feet and the construction of a 584,000-square-foot, mixed-use development with 423 multi-family residential units and a six-level parking structure on 8.9 acres. The project is located at 14651-14697 West Roscoe Boulevard, 8300-8406 North Cedros Avenue, and 8313-8413 North Tobias Avenue, on the northwest corner of Tobias Avenue and Roscoe Boulevard in the community of Mission Hills-Panorama City-North Hills. Reference LAC160811-06  Comment Period: 4/6/2017 - 5/22/2017 Public Hearing: N/A	Draft Environmental Impact Report	City of Los Angeles	Document reviewed - No comments sent
<i>General Land Use (residential, etc.)</i> <b>LAC170411-09</b> Ashley Construction Development Project (Vesting Tentative Map No. 63567)	The proposed project consists of the construction of seven single-family residences on 16.92 acres. The project is located on the west corner of Bridle Trail Road and Rolling View Road.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-ashleyconstruction-042817.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-ashleyconstruction-042817.pdf</a>  Comment Period: 4/6/2017 - 5/6/2017 Public Hearing: 4/20/2017	Notice of Preparation	City of Hidden Hills	SCAQMD staff commented on 4/28/2017
<i>General Land Use (residential, etc.)</i> <b>LAC170413-02</b> ENV-2016-4864: 842-846 S. Grand Ave. & 845 S. Olive St.	The proposed project consists of the construction, use, and maintenance of a 29-story, mixed-use building with 205 residential units and 2,430 square feet of commercial space. The project is located on the northeast corner of South Grand Avenue and West 9th Street in the community of Central City.  Comment Period: 4/13/2017 - 5/3/2017 Public Hearing: N/A	Mitigated Negative Declaration	City of Los Angeles	Document reviewed - No comments sent
<i>General Land Use (residential, etc.)</i> <b>LAC170420-01</b> ENV-2015-540: 3200-3208 W. 6th St. & 601-617 S. Vermont Ave.	The proposed project consists of the construction of a seven-story, 98,000-square-foot, mixed-use building that includes 29,000 square feet of museum space, 103 residential units, and a three-level subterranean parking on 26,257 square feet. The project is located on the southwest corner of South Vermont Avenue and West 6th Street in the community of Wilshire.  Comment Period: 4/20/2017 - 5/22/2017 Public Hearing: N/A	Mitigated Negative Declaration	City of Los Angeles	Document reviewed - No comments sent

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PROJECT TITLE				
<i>General Land Use (residential, etc.)</i>	The proposed project consists of the demolition of an existing parking lot and four commercial and industrial buildings, and the construction of a seven-story, mixed-use building with 278,384 square feet of residential space and 5,000 square feet of commercial space. The project is located on the northeast corner of South Grand Avenue and West Adams Boulevard in the community of Southeast Los Angeles.	Mitigated Negative Declaration	City of Los Angeles	Document reviewed - No comments sent
<b>LAC170420-02</b> ENV-2016-3313: 232-250 W. 25th St., 2504-2528 S. Grand Ave. & 227-243 W. Adams Blvd.				
	Comment Period: 4/20/2017 - 5/10/2017	Public Hearing: N/A		
<i>General Land Use (residential, etc.)</i>	The proposed project consists of the demolition of existing improvements and the construction of a seven-story, 89,434-square-foot, mixed-use building with 118 residential units, 8,795 square feet of office and commercial space, and a two-level subterranean parking on 0.73 acres. The project is located on the northeast corner of North Broadway and Bishops Road in the community of Central City North.	Mitigated Negative Declaration	City of Los Angeles	Document reviewed - No comments sent
<b>LAC170420-03</b> ENV-2016-4076: 1201 N. Broadway				
	Comment Period: 4/20/2017 - 5/22/2017	Public Hearing: N/A		
<i>General Land Use (residential, etc.)</i>	The proposed project consists of the demolition of an existing 238,000-square-foot hotel and the construction of a 245,000-square-foot commercial center on 10.77 acres. The project is located at 6400 East Pacific Coast Highway on the southwest corner of Pacific Coast Highway and East 2nd Street. Reference LAC100427-01	Draft Environmental Impact Report	City of Long Beach	Document reviewed - No comments sent
<b>LAC170421-06</b> 2nd and PCH				
	Comment Period: 4/21/2017 - 6/5/2017	Public Hearing: N/A		
<i>General Land Use (residential, etc.)</i>	This notice consists of information on the public hearing for the proposed project. The proposed project consists of the demolition of 91,729 square feet of the existing structures and the construction of a mixed-use development with 1,719,658 square feet. The project is located on the northwest corner of East 11th Street and South San Pedro Street in the Central City community. Reference LAC160729-05 and LAC150624-04	Notice of Public Hearing	City of Los Angeles	Document does not require comments
<b>LAC170425-02</b> City Market of Los Angeles Project (ENV-2012-3003-EIR)				
	Comment Period: N/A	Public Hearing: 5/17/2017		

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**ATTACHMENT A**  
**INCOMING CEQA DOCUMENTS LOG**  
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<u>SCAQMD LOG-IN NUMBER</u>	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
PROJECT TITLE				
<i>General Land Use (residential, etc.)</i> <b>LAC170426-01</b> 670 Mesquit (ENV-2017-249-EIR)	The proposed project consists of the demolition of storage warehouse facilities and the construction of five, mixed-use buildings totaling 1,792,103 square feet on 5.45 acres. The project is located on the southeast corner of Mesquit Street and South Santa Fe Avenue in the Central City North community.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-670mesquit-051217.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-670mesquit-051217.pdf</a>  Comment Period: 4/25/2017 - 5/24/2017                      Public Hearing: 5/8/2017	Notice of Preparation	City of Los Angeles	SCAQMD staff commented on 5/12/2017
<i>General Land Use (residential, etc.)</i> <b>LAC170426-07</b> Proposed Sixth Street Park, Arts, River, and Connectivity Improvements (PARC) Project	The proposed project consists of the creation of public recreational space on 12 acres in areas underneath and adjacent to the Sixth Street Viaduct. The project includes the demolition of existing urban infrastructure and the construction of community buildings, landscaping, recreational courts and fields, pedestrian paths, utility connections, retaining walls, bikeways, terracing, and connectivity improvements. The project is located on the northwest corner of South Boyle Avenue and 7th Street in the communities of Central City North and Boyle Heights. <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-6thstreetparc-050517.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-6thstreetparc-050517.pdf</a>  Comment Period: 4/13/2017 - 5/15/2017                      Public Hearing: 5/3/2017	Notice of Preparation	City of Los Angeles	SCAQMD staff commented on 5/5/2017
<i>General Land Use (residential, etc.)</i> <b>LAC170426-08</b> Tentative Track Map No. 74920	This is a notice to inform of a minor modification to the proposed project to relocate the ingress/egress from 1st Street to Glendora Avenue. The proposed project consists of the demolition of a 8,021-square-foot commercial theatre and the construction of a three-story, 22-unit residential building on 0.97 acres. The project is located on the southeast corner of Workman Street and Glendora Avenue. Reference LAC170404-04  Comment Period: 4/20/2017 - 5/4/2017                      Public Hearing: N/A	Site Plan	City of La Puente	Document does not require comments
<i>General Land Use (residential, etc.)</i> <b>ORC170411-10</b> Red Hill Avenue Specific Plan	The proposed project consists of the construction of 500 residential units and 325,000 square feet of commercial, retail, and hotel uses on 40 acres. The project is located along Red Hill Avenue between Bryan Avenue and Sycamore Avenue.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-redhillave-042817.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-redhillave-042817.pdf</a>  Comment Period: 4/7/2017 - 5/8/2017                      Public Hearing: 4/20/2017	Notice of Preparation	City of Tustin	SCAQMD staff commented on 4/28/2017

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SCAQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<i>General Land Use (residential, etc.)</i> <b>ORC170428-01</b> SunPointe (SP 12-07, MA 15-09, TT 17433, GPA 14-01 and ZC 14-02)	The proposed project consists of the construction of 71 residential units on 19.5 acres. The project is located on the southeast corner of Cabot Road and Paseo De Colinas. Reference ORC161021-03 and ORC160621-03  Comment Period: 4/27/2017 - 6/12/2017      Public Hearing: N/A	Draft Environmental Impact Report	City of Laguna Niguel	Under review, may submit written comments
<i>General Land Use (residential, etc.)</i> <b>RVC170405-05</b> Greentree Ranch Specific Plan No. 394 (SP00394)	The proposed project consists of the construction of 513 residential units on 197.2 acres of the 327.4-acre site. The project would also include open space for recreation, conservation, water, and roadway circulation uses. The project is located on the northeast corner of El Sobrante Road and McAllister Street in the City of Riverside.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-greentreeranch-042017.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-greentreeranch-042017.pdf</a>  Comment Period: 4/5/2017 - 5/4/2017      Public Hearing: 4/17/2017	Notice of Preparation	County of Riverside	SCAQMD staff commented on 4/20/2017
<i>General Land Use (residential, etc.)</i> <b>RVC170406-08</b> Section 24 Planning Area 8 Grading and Infrastructure Project	This document is a decision notice for the approval of the proposed project. The proposed project consists of the construction of up to 1,200 dwelling units on 320 acres of tribal lands of the Aqua Caliente Band of Cahuilla Indians within the Sphere of Influence of the City of Rancho Mirage in Riverside County. The project is located in Section 24, Township 4 South, Range 5 East, San Bernardino Base. Reference RVC160603-02  Comment Period: N/A      Public Hearing: N/A	Decision Notice/Finding of No Significant Impact	Bureau of Indian Affairs	Document does not require comments
<i>General Land Use (residential, etc.)</i> <b>RVC170411-03</b> Planning Application No.2016-063 (Tentative Tract Map No. 37161), Specific Plan Amendment No. 2016-062 and Change of Zone No. 2016-172	The proposed project consists of the subdivision of 12.43 acres into 54 single-family residential lots. The proposed project is located south of Newport Road, between Menifee Road and Lindenberger Road. Reference LAC160310-09  Comment Period: 4/11/2017 - 4/19/2017      Public Hearing: 4/19/2017	Notice of Intent to Adopt an Addendum to Environmental Impact Report	City of Menifee	Document does not require comments

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SCAQMD LOG-IN NUMBER	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
PROJECT TITLE				
<i>General Land Use (residential, etc.)</i> <b>RVC170411-04</b> Lakeshore Town Center Project	The proposed project consists of the construction of a 132-unit hotel with 9,501 square feet of hotel amenities, 14,772 square feet of retail, and 10 residential condominium units. The project would also include the construction of a four-story, 52-unit condominium building and a five-story, 20,827-square-foot, 56-unit residential building on 24.5 acres. The project is located on the southeast corner of Lakshore Drive and South Spring Street. <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-lakeshoretowncenter-042817.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-lakeshoretowncenter-042817.pdf</a>	Notice of Preparation	City of Lake Elsinore	SCAQMD staff commented on 4/28/2017
	Comment Period: 4/7/2017 - 5/6/2017 Public Hearing: N/A			
<i>General Land Use (residential, etc.)</i> <b>RVC170414-04</b> Canyon View	The proposed project consists of the construction of 80, two-story, single-family homes on 14.83 acres. The project is located on the southwest corner of East Palm Canyon Drive and Gene Autry Trail.	Mitigated Negative Declaration	City of Palm Springs	Document reviewed - No comments sent
	Comment Period: 4/14/2017 - 5/15/2017 Public Hearing: 5/24/2017			
<i>General Land Use (residential, etc.)</i> <b>RVC170420-06</b> Dream Hotel, Case Nos. 5.1132, PD 333, Tentative Tract Map 35236	The proposed project consists of the construction of a 175-room hotel and 30 condominium units. The project is located on the northwest corner of Amado Road and Avenida Caballeros.	Mitigated Negative Declaration	City of Palm Springs	Document reviewed - No comments sent
	Comment Period: 4/20/2017 - 5/9/2017 Public Hearing: 5/10/2017			
<i>General Land Use (residential, etc.)</i> <b>RVC170426-05</b> Mission Trail Apartments Projects	The proposed project consists of the construction and operation of an 81-unit, multi-family residential community on 5.37 acres. The project is located on the southeast corner of Mission Trail and Hidden Trail.	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Lake Elsinore	Document reviewed - No comments sent
	Comment Period: 4/21/2017 - 5/22/2017 Public Hearing: N/A			

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SCAQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<i>General Land Use (residential, etc.)</i> <b>SBC170411-07</b> LVD Terra Vista, LLC	The proposed project consists of the construction of 214 multi-family residential units on 12.1 acres. The project is located on the southwest corner of Church Street and Terra Vista Parkway.  Comment Period: 4/6/2017 - 5/10/2017 Public Hearing: 5/10/2017	Mitigated Negative Declaration	City of Rancho Cucamonga	Document reviewed - No comments sent
<i>General Land Use (residential, etc.)</i> <b>SBC170411-08</b> CORE Affordable Senior Housing	The proposed project consists of the construction of a 140-unit senior housing building on four acres. The project is located west of Day Creek Boulevard, at the terminus of Firehouse Court.  Comment Period: 4/6/2017 - 5/10/2017 Public Hearing: 5/10/2017	Mitigated Negative Declaration	City of Rancho Cucamonga	Document reviewed - No comments sent
<i>General Land Use (residential, etc.)</i> <b>SBC170419-01</b> Morningfield Estates and Loving Savior of the Hills Lutheran Church and School Amendment Project (TTM 19919)	The proposed project consists of the removal of the existing parking and retreat area and the construction of seven single-family homes on 1.32 acres. The project is located on the southwest corner of Morningfield Drive and Peyton Drive.  Comment Period: 4/14/2017 - 5/4/2017 Public Hearing: 5/16/2017	Mitigated Negative Declaration	City of Chino Hills	Document reviewed - No comments sent
<i>General Land Use (residential, etc.)</i> <b>SBC170421-01</b> Subdivision 16-02 (Tentative Parcel Map 19701) and Subdivision 16-03 (Tentative Tract Map 20006)	The proposed project consists of the construction of 120 residential lots, a pocket ark, a water detention basin, and a vehicle storage lot on 41.6 acres. The project is located on the southeast corner of North Magnolia Avenue and Irvington Avenue. Reference SBC170201-20, SBC160712-01 and SBC160329-01  Comment Period: N/A Public Hearing: 5/1/2017	Notice of Public Hearing	City of San Bernardino	Document does not require comments

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SCAQMD LOG-IN NUMBER	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
PROJECT TITLE				
<i>Plans and Regulations</i>	The proposed project consists of the land use, transportation, infrastructure, economic development, and urban design strategies to guide future development on 94.3 acres. The project is located on the northwest corner of Sepulveda Boulevard and El Segundo Boulevard.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-smokyhollow-042017.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-smokyhollow-042017.pdf</a>  Comment Period: 4/4/2017 - 5/1/2017 Public Hearing: 4/12/2017	Notice of Preparation	City of El Segundo	SCAQMD staff commented on 4/20/2017
<b>LAC170404-03</b> Smoky Hollow Specific Plan Update				
<i>Plans and Regulations</i>	The proposed project consists of the amendments to the zoning ordinance to allow a maximum of 18 new billboards, to limit digital billboards, and to modify permits for existing billboards within the City. The project is located along a 1.6-mile of Sunset Boulevard extending west to east from Sunset Hills Road to west of Havenhurst Drive.  Comment Period: 4/6/2017 - 4/27/2017 Public Hearing: N/A	Negative Declaration	City of West Hollywood	Document does not require comments
<b>LAC170411-12</b> Sunset Strip Off-Site Signage Policy				
<i>Plans and Regulations</i>	The proposed project consists of the development of a specific plan to guide the future development within the five-mile-long, one-mile-wide corridor along the Exposition Light Rail Transit (LRT). The project would include zoning changes, new land use designations, streetscape plans, and design standards at five LRT stations within the communities of the West Los Angeles, Palms-Mar Vista-Del Rey, West Adams, and Baldwin Hills-Leimert. Reference LAC130315-01  Comment Period: 4/6/2017 - 6/5/2017 Public Hearing: N/A	Draft Environmental Impact Report	City of Los Angeles	Under review, may submit written comments
<b>LAC170412-02</b> Exposition Corridor Transit Neighborhood Plan (ENV-2013-622-EIR)				
<i>Plans and Regulations</i>	The proposed project consists of the establishment of land use development policies and guidelines for the areas along a 2.73-mile portion of the Arrow Highway. The project would provide guidance to support the development of over 1.4 million square feet of commercial uses, 1,611 residential units, and 8.6 acres of open space on 106 acres. The project is located north of the Arrow Highway between North Calera Avenue and North Rennell Avenue.  Comment Period: 4/13/2017 - 5/11/2017 Public Hearing: 4/19/2017	Notice of Preparation	City of Glendora	Document reviewed - No comments sent
<b>LAC170413-05</b> Arrow Highway Specific Plan				

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SCAQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<i>Plans and Regulations</i> <b>LAC170414-03</b> Arrow Highway Specific Plan	The document consists of the amendments to the Notice of Preparation for the proposed project and the extension of the public review period from May 11 to May 15, 2017. The proposed project consists of the establishment of land use development policies and guidelines for the areas along a 2.73-mile portion of the Arrow Highway. The project would provide guidance to support the development of over 1.4 million square feet of commercial uses, 1,611 residential units, and 8.6 acres of open space on 106 acres. The project is located north of the Arrow Highway between North Calera Avenue and North Rennell Avenue. Reference LAC170413-05 <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-arrowhighway-050517.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-arrowhighway-050517.pdf</a>	Notice of Preparation	City of Glendora	SCAQMD staff commented on 5/5/2017
	Comment Period: 4/12/2017 - 5/15/2017 Public Hearing: 4/19/2017			
<i>Plans and Regulations</i> <b>ORC170407-04</b> Zoning Ordinance Amendment 17-0581 and Local Coastal Program Amendment	The proposed project consists of the amendments to the City of Laguna Beach's Municipal Code, zoning ordinance and the Local Coastal Program regarding the appeals and revocation process and procedures.	Notice of Public Hearing	City of Laguna Beach	Document does not require comments
	Comment Period: 4/7/2017 - 4/19/2017 Public Hearing: 4/19/2017			
<i>Plans and Regulations</i> <b>ORC170414-02</b> Beach Boulevard Specific Plan EIR No. 350	The proposed project consists of the development of guidelines for future developments and public improvements within the areas along the 1.5-mile portion of Beach Boulevard between Starr Street and Crescent Avenue. <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-beachblvdsn350-050517.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-beachblvdsn350-050517.pdf</a>	Notice of Preparation	City of Anaheim	SCAQMD staff commented on 5/5/2017
	Comment Period: 4/13/2017 - 5/12/2017 Public Hearing: 4/27/2017			

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SCAQMD LOG-IN NUMBER	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
PROJECT TITLE				
<i>Plans and Regulations</i>	The proposed project consists of the amendments to the citywide Coastal Land Use Plan and the implementation plan of the certified Local Coastal Program to add land use and property development regulations for the Lido Villas Planned Community, to establish a parking management district for the Balboa Village, and to establish an encroachment program for East Oceanfront.	Notice of Availability of Draft Local Coastal Program Amendments	City of Newport Beach	Document does not require comments
<b>ORC170419-03</b> Implementation Plan Clean-up (LC2017-002), Balboa Village Parking Management Overlay District (LC2017-001), Oceanfront Encroachment Program (LC2013-002)				
	Comment Period: N/A			
<i>Plans and Regulations</i>	The proposed project consists of the development of updates to the Housing Element of the City's General Plan The project would identify the existing and projected housing needs, establish housing policies, and develop a housing program to respond to the current and future housing needs within the City.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-riverside20142021-050517.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-riverside20142021-050517.pdf</a>	Notice of Preparation	City of Riverside	SCAQMD staff commented on 5/5/2017
<b>RVC170413-03</b> City of Riverside 2014-2021 Housing Element Update Project				
	Comment Period: 4/12/2017 - 5/11/2017			
<i>Plans and Regulations</i>	The proposed project consists of the establishment of the land use regulations and development guidelines for circulation, drainage, architectural features, and natural resources protection on 2,950 acres. The project is located on the northwest corner of Grand Avenue and Corydon Road. Reference RVC161110-07	Draft Environmental Impact Report	City of Lake Elsinore	Under review, may submit written comments
<b>RVC170425-10</b> East Lake Specific Plan Amendment No. 11 Project				
	Comment Period: 4/18/2017 - 6/2/2017			
<i>Plans and Regulations</i>	The proposed project consists of the development of land use development goals, policies, development standards, design guidelines, infrastructure improvements, and implementation strategies for 117 acres. The project would include 500 residential units and 940,000 square feet of commercial uses and open space. The project is located on the southeast corner of Deglet Noor Street and Indio Boulevard.	Notice of Availability of a Draft Program Environmental Impact Report	City of Indio	Under review, may submit written comments
<b>RVC170426-04</b> City of Indio Downtown Specific Plan Project				
	Comment Period: 4/24/2017 - 6/7/2017			

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<i>Plans and Regulations</i> <b>SBC170426-02</b> Citrus Trails Master Plan and Tract Map No. 18990	<p>The proposed project consists of the construction of mixed-use development with 581 residential units and office uses and parkland on 112 acres. The project is located on the southeast corner of Redland Boulevard and California Street. Reference SBC161129-03</p> <p><a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/deir-citustrailsmaster-050417.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/deir-citustrailsmaster-050417.pdf</a></p> <p>Comment Period: 4/25/2017 - 6/8/2017                      Public Hearing: N/A</p>	Notice of Availability of a Draft Environmental Impact Report	City of Loma Linda	SCAQMD staff commented on 5/4/2017

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**ATTACHMENT B\***  
**ONGOING ACTIVE PROJECTS FOR WHICH SCAQMD HAS**  
**OR IS CONTINUING TO CONDUCT A CEQA REVIEW**

<u>SCAQMD LOG-IN NUMBER</u> PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<b>Warehouse &amp; Distribution Centers</b> <b>RVC170321-05</b> Space Center Industrial Project (Case No. MA 14126)	The proposed project consists of the construction of two warehouse buildings, totaling 1,124,860 square feet, on 53.1 acres. The project is located on the southwest corner of Etiwanda Avenue and Iberia Street. Reference RVC150519-03  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/deir-spacecenterindustrial-050517.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/deir-spacecenterindustrial-050517.pdf</a> Comment Period: 3/22/2017 - 5/5/2017 Public Hearing: N/A	Draft Environmental Impact Report	City of Jurupa Valley	SCAQMD staff commented on 5/5/2017
<b>Warehouse &amp; Distribution Centers</b> <b>RVC170330-13</b> Plot Plan No. 26220 - EA43004	The proposed project consists of the construction of a trucking distribution center with a 56,000-square-foot loading dock and a 10,000-square-foot main office on 19.19 acres. The project is located on the northeast corner of Placentia Avenue and West Frontage Road in the Mead Valley Area.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/sp-plotplan26220-041217.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/sp-plotplan26220-041217.pdf</a> Comment Period: 3/30/2017 - 4/20/2017 Public Hearing: N/A	Site Plan	County of Riverside	SCAQMD staff commented on 4/12/2017
<b>Warehouse &amp; Distribution Centers</b> <b>SBC170321-04</b> Colony Commerce Center East Specific Plan (PSP 16-03)	The proposed project consists of the construction of a 1,904,000-square-foot industrial and business park development on 95 acres. The project is located on the southwest corner of Merrill Avenue and Archibald Avenue.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-colonycommercecenter-040617.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-colonycommercecenter-040617.pdf</a> Comment Period: 3/21/2017 - 4/17/2017 Public Hearing: 3/27/2017	Notice of Preparation	City of Ontario	SCAQMD staff commented on 4/6/2017
<b>Airports</b> <b>LAC170223-04</b> Los Angeles International Airport (LAX) Terminals 2 and 3 Modernization	The proposed project consists of the modernization to Terminals 2 and 3 at LAX. The modernization will include the demolition of the existing service areas and the construction of 832,000 square feet of new building space, resulting in a total square footage of 1,620,010 square feet of building space. The project is scheduled to be completed in stages over 76 months beginning in 2017. The project is located at 1 World Way within the Central Terminal Area of LAX between Terminal 1 to the east and the Tom Bradley International Terminal to the west. Reference LAC160811-03  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/deir-laxt2t3modernization-040517.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/deir-laxt2t3modernization-040517.pdf</a> Comment Period: 2/23/2017 - 4/10/2017 Public Hearing: 3/21/2017	Draft Environmental Impact Report	Los Angeles World Airports	SCAQMD staff commented on 4/5/2017

\*Sorted by Comment Status, followed by Land Use, then County, then date received.

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**ATTACHMENT B**  
**ONGOING ACTIVE PROJECTS FOR WHICH SCAQMD HAS**  
**OR IS CONTINUING TO CONDUCT A CEQA REVIEW**

<u>SCAQMD LOG-IN NUMBER</u> PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<i>Airports</i> <b>ORC170330-14</b> John Wayne Airport General Aviation Improvement Program	The proposed project consists of the evaluation of and improvements to the existing aviation facilities on 504 acres. The project is the John Wayne Airport that is located at 18601 Airport Way on the southwest corner of Main Street and MacArthur Boulevard.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-johnwayneairport-042017.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-johnwayneairport-042017.pdf</a> Comment Period: 4/1/2017 - 5/1/2017 Public Hearing: 4/12/2017	Notice of Preparation	County of Orange	SCAQMD staff commented on 4/20/2017
<i>Industrial and Commercial</i> <b>LAC170323-06</b> ENV-2016-4204: Central City	The proposed project consists of the demolition of an existing surface parking lot, and the construction of an 18-story, 247-room hotel on 1,821 square feet. The project is located on the southeast corner of James M. Wood Boulevard and Georgia Street in the Central City community.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/mnd-jameswoodgeorgia-040417.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/mnd-jameswoodgeorgia-040417.pdf</a> Comment Period: 3/23/2017 - 4/12/2017 Public Hearing: N/A	Mitigated Negative Declaration	City of Los Angeles	SCAQMD staff commented on 4/4/2017
<i>Industrial and Commercial</i> <b>ORC170330-09</b> Freeway-Oriented Signage for The Outlets at San Clemente	The proposed project consists of the mounting of 36 freeway signs on buildings. The project is located at 101 West Avenida Vista Hermosa on the northeast corner of West Avenida Vista Hermosa and East Avenida Pico.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-freewayorientedsignage-040617.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-freewayorientedsignage-040617.pdf</a> Comment Period: 3/28/2017 - 4/26/2017 Public Hearing: 4/17/2017	Notice of Preparation	City of San Clemente	SCAQMD staff commented on 4/6/2017
<i>Industrial and Commercial</i> <b>RVC170317-03</b> Ethanac and Barnett Gas Station and Commercial Center	The proposed project consists of the construction of a 3,800-square-foot convenience store, a gas station with 8 pumps, a 2,080-square-foot car wash service, and a 4,365-square-foot fast food restaurant on 2.5 acres. The project is located on the southwest corner of Ethanac Road and Barnett Road.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/sp-ethanacandbarnett-040417.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/sp-ethanacandbarnett-040417.pdf</a> Comment Period: 3/15/2017 - 4/10/2017 Public Hearing: N/A	Site Plan	City of Menifee	SCAQMD staff commented on 4/4/2017
<i>Industrial and Commercial</i> <b>SBC170310-03</b> Design Review DRC2016-00695	The proposed project consists of the construction of two industrial buildings totaling 150,003 square feet on 7.52 acres. The project is located at 9500 and 9505 Feron Boulevard, near the southeast corner of East 9th Street and Helms Avenue.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/mnd-950feronblvd-041217.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/mnd-950feronblvd-041217.pdf</a> Comment Period: 3/7/2017 - 4/12/2017 Public Hearing: 4/12/2017	Mitigated Negative Declaration	City of Rancho Cucamonga	SCAQMD staff commented on 4/12/2017

# - Project has potential environmental justice concerns due to the nature and/or location of the project.



**ATTACHMENT B**  
**ONGOING ACTIVE PROJECTS FOR WHICH SCAQMD HAS**  
**OR IS CONTINUING TO CONDUCT A CEQA REVIEW**

SCAQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<b>Waste and Water-related</b> <b>RVC170307-08</b> Robert A. Nelson Transfer Station/Materials Recovery Facility Improvements Project	The proposed project consists of the removal of the existing pilot composting system and the construction of an aerated static pile compost system, a food waste processing unit, and an underground storm water infiltration system. The project is located at 1930 Agua Mansa Road between Wilson Street and Brown Avenue in the City of Jurupa Valley.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/mnd-robertnelsonmrf-040717.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/mnd-robertnelsonmrf-040717.pdf</a> Comment Period: 3/7/2017 - 4/7/2017 Public Hearing: N/A	Mitigated Negative Declaration	Riverside County Department of Waste Resources	SCAQMD staff commented on 4/7/2017
<b>Waste and Water-related</b> <b>SBC170328-07</b> Proposed Response Plan for Barton Road I-215 Interchange Improvement Project, Demetri/A-1 Cleaners Parcel	The proposed project consists of the actions to clean up the contaminated soil at the former Demetri property that is located at 21900 Barton Road on the northeast corner of Grand Terrace Road and Barton Road in the City of Grand Terrace.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/rp-demetria1-042817.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/rp-demetria1-042817.pdf</a> Comment Period: 4/3/2017 - 5/3/2017 Public Hearing: N/A	Draft Remediation Plan	Department of Toxic Substances Control	SCAQMD staff commented on 4/28/2017
<b>Utilities</b> <b>RVC170330-12</b> Plot Plan No. 26197 - EA42996	The proposed project consists of the construction of a 70-foot wireless telecommunication facility on 1.4 acres. The project is located on the northeast corner of Van Buren Boulevard and Washington Street in the Lake Mathews and Woodcrest Area.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/ipc-verizoncelltower-040417.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/ipc-verizoncelltower-040417.pdf</a> Comment Period: 3/30/2017 - 4/20/2017 Public Hearing: N/A	Site Plan	County of Riverside	SCAQMD staff commented on 4/4/2017
<b>Institutional (schools, government, etc.)</b> <b>ORC170331-01</b> Irvine Unified School District Eastshore Elementary School	The proposed project consists of the construction of two classrooms that would increase enrollment by 66 students to a maximum capacity of 667. The project is located on the northwest corner of Winterbranch and Eastshore in the City of Irvine.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/mnd-eastshoreelementary-042817.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/mnd-eastshoreelementary-042817.pdf</a> Comment Period: 3/30/2017 - 4/28/2017 Public Hearing: 5/2/2017	Mitigated Negative Declaration	Irvine Unified School District	SCAQMD staff commented on 4/28/2017
<b>Retail</b> <b>RVC170314-01</b> Goetz Gas Station and Commercial Center (CUP No. 2017-055)	The proposed project consists of the construction of a 1,152-square-foot gas station with four dual pumps on 2 acres. The project is located on the north corner of Goetz Road and Vista Way.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/sp-goetzgasstation-040417.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/sp-goetzgasstation-040417.pdf</a> Comment Period: 3/13/2017 - 4/5/2017 Public Hearing: N/A	Site Plan	City of Menifee	SCAQMD staff commented on 4/4/2017

# - Project has potential environmental justice concerns due to the nature and/or location of the project.

## ATTACHMENT B

SCAQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<i>General Land Use (residential, etc.)</i> <b>LAC170307-01</b> 6901 Santa Monica Boulevard Mixed-Use Project (ENV-2015-4612-EIR)	The proposed project consists of the demolition and removal of the existing 54,661-square-foot office and automobile storage buildings and the construction of a seven-story, mixed-use building with 231 units, 15,000 square feet of ground-floor commercial uses, and two levels of subterranean parking on 1.67 acres. The project is located on the northwest corner of Santa Monica Boulevard and North Orange Drive in the Hollywood community. Reference LAC160211-03 <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/deir-6901santamonica Blvd-041217.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/deir-6901santamonica Blvd-041217.pdf</a> Comment Period: 3/2/2017 - 4/17/2017      Public Hearing: N/A	Draft Environmental Impact Report	City of Los Angeles	SCAQMD staff commented on 4/12/2017
<i>General Land Use (residential, etc.)</i> <b>LAC170322-02</b> Sand Canyon Plaza Mixed-Use Project	The proposed project consists of the construction of 580 residential dwelling units, 55,600 square feet of retail commercial, a 75,000-square-foot assisted living facility with up to 120 beds, and two roundabouts to its roadway improvements on 87 acres. The project is located on the northeast corner of Soledad Canyon Road and Sand Canyon Road. Reference LAC150501-02 <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/deir-sandcanyonplaza-041417.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/deir-sandcanyonplaza-041417.pdf</a> Comment Period: 3/3/2017 - 4/17/2017      Public Hearing: 3/21/2017	Draft Environmental Impact Report	City of Santa Clarita	SCAQMD staff commented on 4/14/2017
<i>General Land Use (residential, etc.)</i> <b>LAC170330-08</b> ENV-2015-4087: 11460-11488 W. Gateway Blvd., 2426 S. Colby Ave., 2425 S. Butler Ave.	The proposed project consists of the demolition of the existing commercial structures and the construction of a five-story, 88,160-square-foot, multi-family residential building with 129 units and subterranean parking. The project is located on the southeast corner of West Pico Boulevard and Gateway Boulevard in the community of Palms-Mar Vista-Del Rey. <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/mnd-11460gateway-041217.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/mnd-11460gateway-041217.pdf</a> Comment Period: 3/30/2017 - 4/19/2017      Public Hearing: N/A	Mitigated Negative Declaration	City of Los Angeles	SCAQMD staff commented on 4/12/2017
<i>General Land Use (residential, etc.)</i> <b>SBC170310-01</b> Pepper Avenue Specific Plan	The proposed project consists of the construction of 275 multi-family residential units, 462,000 square feet of retail space, 125,000 square feet of business park uses, and a pedestrian bridge connecting the project to Frisbie Park on 101.7 acres. The project will also preserve 30 acres of habitat. The project is located near the northeast corner of Walnut Avenue and Eucalyptus Avenue. Reference SBC160126-05 <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/deir-pepperavenue-042117.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/deir-pepperavenue-042117.pdf</a> Comment Period: 3/7/2017 - 4/24/2017      Public Hearing: N/A	Draft Environmental Impact Report	City of Rialto	SCAQMD staff commented on 4/21/2017

# - Project has potential environmental justice concerns due to the nature and/or location of the project.

**ATTACHMENT C**  
**ACTIVE SCAQMD LEAD AGENCY PROJECTS**  
**THROUGH APRIL 30, 2017**

PROJECT DESCRIPTION	PROPONENT	TYPE OF DOCUMENT	STATUS	CONSULTANT
Tesoro Refinery proposes to integrate the Tesoro Wilmington Operations with the Tesoro Carson Operations (former BP Refinery). The proposed project also includes modifications of storage tanks at both facilities, new interconnecting pipelines, and new electrical connections. In addition, Carson's Liquid Gas Rail Unloading facilities will be modified. The proposed project will be designed to comply with the federally mandated Tier 3 gasoline specifications and with State and local regulations mandating emission reductions.	Tesoro Refining and Marketing Company Los Angeles Refinery	Environmental Impact Report (EIR)	The comment period for the Draft EIR closed on June 10, 2016. Responses to comments are being prepared. Written responses to public agencies were sent on March 7, 2017 and March 9, 2017.	Environmental Audit, Inc.
The Phillips 66 (formerly ConocoPhillips) Los Angeles Refinery Ultra Low Sulfur Diesel project was originally proposed to comply with federal, state and SCAQMD requirements to limit the sulfur content of diesel fuels. Litigation against the CEQA document was filed. Ultimately, the California Supreme Court concluded that the SCAQMD had used an inappropriate baseline and directed the SCAQMD to prepare an EIR, even though the project has been built and has been in operation since 2006. The purpose of this CEQA document is to comply with the Supreme Court's direction to prepare an EIR.	Phillips 66 (formerly ConocoPhillips), Los Angeles Refinery	Environmental Impact Report (EIR)	The Notice of Preparation/Initial Study (NOP/IS) was circulated for a 30-day public comment period on March 26, 2012 to April 26, 2012. The consultant submitted the administrative Draft EIR to SCAQMD in late July 2013. The Draft EIR was circulated for a 45-day public review and comment period from September 30, 2014 to November 13, 2014. Two comment letters were received and responses to comments are being prepared.	Environmental Audit, Inc.
Quemetco is proposing an increase in the daily furnace feed rate.	Quemetco	Environmental Impact Report (EIR)	A Notice of Preparation/Initial Study (NOP/IS) has been prepared by the consultant and is under review by SCAQMD staff.	Trinity Consultants

BOARD MEETING DATE: June 2, 2017

AGENDA NO. 16

PROPOSAL: Report of RFQs Scheduled for Release in June

SYNOPSIS: This report summarizes the RFQs for budgeted services over \$75,000 scheduled to be released for advertisement for the month of June.

COMMITTEE: Administrative, May 12, 2017; Recommended for Approval

**RECOMMENDED ACTION:**

Approve the release of RFQs for the month of June.

Wayne Nastri  
Executive Officer

MBO:lg

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**Background**

At its January 8, 2010 meeting, the Board approved a revised Procurement Policy and Procedure. Under the revised policy, RFQs for budgeted items over \$75,000, which follow the Procurement Policy and Procedure, no longer require individual Board approval. However, a monthly report of all RFQs over \$75,000 is included as part of the Board agenda package and the Board may, if desired, take individual action on any item. The report provides the title and synopsis of the RFQ, the budgeted funds available, and the name of the Deputy Executive Officer/Asst. Deputy Executive Officer responsible for that item. Further detail including closing dates, contact information, and detailed proposal criteria will be available online at <http://www.aqmd.gov/grants-bids> following Board approval on June 2, 2017.

**Outreach**

In accordance with SCAQMD's Procurement Policy and Procedure, a public notice advertising the RFPs and inviting bids will be published in the Los Angeles Times, the Orange County Register, the San Bernardino Sun, and Riverside County's Press Enterprise newspapers to leverage the most cost-effective method of outreach to the South Coast Basin.

Additionally, potential bidders may be notified utilizing SCAQMD's own electronic listing of certified minority vendors. Notice of the RFQs will be emailed to the Black and Latino Legislative Caucuses and various minority chambers of commerce and business associations, and placed on the Internet at SCAQMD's website (<http://www.aqmd.gov>) where it can be viewed by making the selection "Grants & Bids."

**Proposal Evaluation**

Proposals received will be evaluated by applicable diverse panels of technically-qualified individuals familiar with the subject matter of the project or equipment and may include outside public sector or academic community expertise.

**Attachment**

Report of RFQs Scheduled for Release on June 2, 2017

**June 2, 2017 Board Meeting  
Report on RFQs Scheduled for Release on June 2, 2017**

(For detailed information visit SCAQMD's website at  
<http://www.aqmd.gov/grants-bids> following Board approval on June 2, 2017)

**RESEARCH AND DEVELOPMENT OR SPECIAL TECHNICAL EXPERTISE**

RFQ #Q2017-12	Issue RFQ to Purchase Compressed U.S. EPA Protocol Calibration Gases, Ultrapure Air, and Other Specialty Gases for the SCAQMD Laboratory	Miyasato/3249
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SCAQMD expects to spend approximately \$75,000 to purchase compressed U.S. EPA protocol calibration gases, ultrapure air, and other gases needed in support of Federal air monitoring programs in stations for calibration, auditing, and to assess data quality. This action is to issue an RFQ to purchase U.S. EPA protocol calibration gases, ultrapure air, and other specialty gases needed in support of ambient monitoring programs in FY 2017-18. Funding for this purchase has been requested in the FY 2017-18 Budget.

RFQ #Q2017-13	Issue RFQ to Purchase Compressed Gases and Cryogenic Liquids for the SCAQMD Laboratory	Miyasato/3249
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The SCAQMD laboratory expects to spend approximately \$200,000 in FY 2017-18 for the purchase of compressed gases and cryogenic liquids. These gases are used as part of a wide variety of analytical and monitoring needs; most commonly compressed gases are used as carrier and purging agents, and cryogenic liquids to concentrate samples for gas chromatographic analysis related to various U.S. EPA programs, environmental justice assessments, compliance, special studies and other network monitoring. This action is to issue an RFQ to purchase compressed gases and cryogenic liquids in fiscal year 2017-2018. Funding for this purchase has been requested in the FY 2017-18 Budget.

BOARD MEETING DATE: June 2, 2017

AGENDA NO. 17

REPORT: Rule and Control Measure Forecast

SYNOPSIS: This report highlights SCAQMD rulemaking activities and public workshops potentially scheduled for 2017.

COMMITTEE: No Committee Review

RECOMMENDED ACTION:  
Receive and file.

Wayne Nastri  
Executive Officer

PMF:SN:AFM:RM

## 2017 MASTER CALENDAR

*\*An asterisk indicates that the rulemaking is a potentially significant hearing.*

*+This proposed rule will reduce criteria air contaminants and assist toward attainment of ambient air quality standards.*

July	Title and Description	Type of Rulemaking
1118 <sup>+</sup>	<b>Control of Emissions from Refinery Flares</b> The proposed amendments would address emissions from flaring during external events like power failures on the local grid and from flaring events caused by refinery activities. <i>Ian MacMillan 909.396.3244 CEQA and Socio: Jillian Wong 909.396.3176</i>	Other
1466	<b>Toxic Air Contaminant Emissions from Decontamination of Soil</b> Proposed Rule 1466 will establish requirements to control toxic particulate emissions from activities involving storing, handling and transporting soils during soil decontamination activities. <i>Susan Nakamura 909.396.3105 CEQA and Socio: Jillian Wong 909.396.3176</i>	Toxics

## 2017 MASTER CALENDAR (continued)

September	Title and Description	Type of Rulemaking
1148.3	<b>Requirements for Underground Gas Storage</b> Proposed Rule 1148.3 will establish requirements to address public nuisance and VOC emissions from underground natural gas storage facilities. <i>Susan Nakamura 909.396.3105 CEQA and Socio: Jillian Wong 909.396.3176</i>	Other
1168	<b>Adhesive and Sealant Applications (CTS-02)</b> Amendments to Rule 1168 will partially implement CTS-02 and reflect improvements in adhesive and sealant technology, as well as remove outdated provisions and include minor clarifications. <i>Michael Krause 909.396.2706 CEQA and Socio: Jillian Wong 909.396.3176</i>	AQMP
1401	<b>New Source Review of Toxic Air Contaminants</b> Amendments will update requirements for gas stations and paint booths, and will consider additional administrative changes. <i>Susan Nakamura 909.396.3105 CEQA and Socio: Jillian Wong 909.396.3176</i>	Toxics
2202	<b>On-Road Motor Vehicle Mitigation Options</b> Rule 2202 will be amended to enhance emission reductions obtained from the Employee Commute Reduction Program (ECRP) rule option. <i>Carol Gomez 909.396.3264 CEQA and Socio: Jillian Wong 909.396.3176</i>	Other
<b>October</b>		
415*	<b>Odors from Animal Rendering Facilities</b> Proposed Rule 415 will establish requirements to reduce odors created during animal rendering operations. The proposed rule will establish Best Management Practices, and will consider enclosure, odor control requirements for the receipt and processing of rendering material and wastewater, and possibly requirements for an Odor Mitigation Plan. <i>Tracy Goss 909.396.3106 CEQA and Socio: Jillian Wong 909.396.3176</i>	Other
Reg. IX Reg. X	<b>Standards of Performance for New Stationary Sources</b> <b>National Emission Standards for Hazardous Air Pollutants</b> Amendments to Regulations IX and X are periodically made to incorporate by reference new or amended federal performance standards that have been enacted by U.S. EPA for stationary sources. Regulations IX and X provide stationary sources with a single point of reference for determining which federal and local requirements apply to their specific operations. <i>Carol Gomez 909.396.3264 CEQA and Socio: Jillian Wong 909.396.3176</i>	Other



## 2017 MASTER CALENDAR (continued)

October (continued)	Title and Description	Type of Rulemaking
1407* 1407.1	<p><b>Control of Emissions of Arsenic, Cadmium and Nickel from Non-Ferrous Metal Operations</b>  Proposed Rule 1407 will establish additional requirements to minimize air toxics from metal operations. Staff is analyzing sources subject to Rule 1407 and may develop a separate Rule 1407.1 for the largest sources subject to Rule 1407.  <i>Susan Nakamura 909.396.3105 CEQA and Socio: Jillian Wong 909.396.3176</i></p>	Toxics
<b>November</b>		
1118.1	<p><b>Control of Emissions from Non-Refinery Flares</b>  Proposed Rule 1118.1 will seek to reduce emissions from flaring at non-refinery facilities, including alternate uses of gases. The rule would require the installation of newer flares implementing Best Available Control Technology at sources such as landfills, wastewater treatment plants, and oil and gas production facilities. Alternate uses of flare gas would be encouraged, especially for facilities that, for example, would clean it for use as a transportation fuel, process it to become pipeline-quality dry natural gas, or direct it to equipment that can convert its energy into power and/or heat.  <i>Michael Krause 909.396.2706 CEQA and Socio: Jillian Wong 909.396.3176</i></p>	Other
1180	<p><b>Refinery Fenceline and Community Monitoring</b>  Proposed Rule 1180 will establish the requirements for fenceline and community monitoring at petroleum refineries.  <i>Susan Nakamura 909.396.3105 CEQA and Socio: Jillian Wong 909.396.3176</i></p>	Other
1420	<p><b>Emission Standard for Lead</b>  In October 2008, U.S. EPA lowered the National Ambient Air Quality Standard (NAAQS) for lead from 1.5 to 0.15 µg/m<sup>3</sup>. Proposed Rule 1420 will establish requirements for lead-emitting sources that are not covered under Rules 1420.1 and Rule 1420.2 to ensure compliance with the lead NAAQS.  <i>Susan Nakamura 909.396.3105 CEQA and Socio: Jillian Wong 909.396.3176</i></p>	Toxics
1435	<p><b>Control of Emissions from Metal Heat Treating Processes</b>  Proposed Rule 1435 would establish requirements to reduce metal particulate emissions from heat treating processes.  <i>Susan Nakamura 909.396.3105 CEQA and Socio: Jillian Wong 909.396.3176</i></p>	Toxics

## 2017 MASTER CALENDAR (continued)

December		
1153.1	<b>Emissions of Oxides of Nitrogen from Commercial Food Ovens</b> Rule 1153.1 was adopted in November 2014 and established NOx emission limits for various types of existing commercial food ovens on a specified compliance schedule. Amendments may be necessary to address applicability and technological feasibility of low-NOx burner technologies for new commercial food ovens. <i>Tracy Goss 909.396.3106 CEQA and Socio: Jillian Wong 909.396.3176</i>	Other
1410*	<b>Hydrogen Fluoride Use at Refineries</b> Proposed Rule 1410 will establish requirements for use of hydrogen fluoride at refineries. <i>Michael Krause 909.396.2706 CEQA and Socio: Jillian Wong 909.396.3176</i>	Toxics
1426*	<b>Emissions from Metal Finishing Operations</b> Proposed amendments to Rule 1426 will establish requirements to reduce nickel, cadmium and other air toxics from plating operations.	Toxics
1469*	<b>Hexavalent Chromium Emissions from Chromium Electroplating and Chromic Acid Anodizing Operations</b> Proposed Amended Rule 1469 will strengthen requirements to address potential fugitive emissions from hexavalent chrome plating and anodizing operations. <i>Susan Nakamura 909.396.3104 CEQA and Socio: Jillian Wong 909.396.3176</i>	Toxics
1445	<b>Control of Toxic Emissions from Laser Arc Cutting</b> Proposed Rule 1445 will establish requirements to reduce toxic metal particulate emissions from laser arc cutting. <i>Susan Nakamura 909.396.3105 CEQA and Socio: Jillian Wong 909.396.3176</i>	Toxics

## 2017 MASTER CALENDAR (continued)

### 2017 To-Be-Determined

To-Be-Determined	Title and Description	Type of Rulemaking
102	<b>Definition of Terms</b> Staff may amend Rule 102 to add or revise definitions to support amendments to other Regulation XI rules. <i>Susan Nakamura 909.396.3105 CEQA and Socio: Jillian Wong 909.396.3176</i>	Other
223	<b>Emission Reduction Permits for Large Confined Animal Facilities</b> Proposed Amended Rule 223 will seek additional emission reductions from large confined animal facilities by lowering the applicability threshold. <i>Tracy Goss 909.396.3106 CEQA and Socio: Jillian Wong 909.396.3176</i>	AQMP
224	<b>Incentives for Super-Compliant Technologies</b> Proposed Rule 224 will outline strategies and requirements to incentivize the development, establishment and use of super-compliant technologies. It may be considered as a part of Rule 219 amendments or proposed as a separate incentive. <i>Tracy Goss 909.396.3106 CEQA and Socio: Jillian Wong 909.396.3176</i>	Other
416	<b>Odors from Kitchen Grease Processing</b> Proposed Rule 416 will reduce odors created during kitchen grease processing operations. The proposed rule will establish best management practices, and examine enclosure requirements for wastewater treatment operations and filter cake storage. The proposed rule may also contain requirements for an Odor Mitigation Plan. <i>Tracy Goss 909.396.3106 CEQA and Socio: Jillian Wong 909.396.3176</i>	Other
430	<b>Breakdown Provisions</b> This rule will be amended or replaced to address specific issues raised by U.S. EPA regarding start-ups or shutdowns associated with breakdowns. <i>Tracy Goss 909.396.3106 CEQA and Socio: Jillian Wong 909.396.3176</i>	AQMP

**2017 MASTER CALENDAR (continued)**

**2017 To-Be-Determined (continued)**

<b>To-Be-Determined</b>	<b>Title and Description</b>	<b>Type of Rulemaking</b>
<p align="center">1106 1106.1</p>	<p><b>Marine Coating Operations</b>  <b>Pleasure Craft Coating Operations</b>            (This item was previously submitted to the Board, but rejected. It will be brought back for Board direction.)            The proposed amendment is two-fold: first, Rule 1106.1 is proposed to be rescinded and second, Rule 1106 would subsume the requirements of 1106.1, and revise VOC content limits for pretreatment wash primers, antenna, repair and maintenance thermoplastic, inorganic zinc, and specialty marking coatings in order to align limits with U.S. EPA Control Techniques Guidelines and other California air districts, and add new categories for marine aluminum antifoulant, mist, nonskid and organic zinc coatings and marine deck primer sealant. The proposed amendment would also add provisions for pollution prevention measures, enhanced enforceability, and to promote clarity and consistency.</p> <p align="right"><i>Philip Fine 909.396.2239 CEQA and Socio: Jillian Wong 909.396.3176</i></p>	<p align="center">Other</p>
<p align="center">1107<sup>+</sup></p>	<p><b>Coating of Metal Parts and Products (CTS-02)</b>            Potential amendments to Rule 1107 would further reduce VOC emissions and improve rule clarity and enforceability.</p> <p align="right"><i>Philip Fine 909.396.2239 CEQA and Socio: Jillian Wong 909.396.3176</i></p>	<p align="center">AQMP</p>
<p align="center">1113</p>	<p><b>Architectural Coatings</b>            Depending on the final recommendations of the tBAC white paper and the actions of the Scientific Review Panel for the Office of Environmental Health Hazard Assessment (OEHHA), reassessment of the limited tBAC exemption in the Rule will occur.</p> <p align="right"><i>Philip Fine 909.396.2239 CEQA and Socio: Jillian Wong 909.396.3176</i></p>	<p align="center">Other</p>

**2017 MASTER CALENDAR (continued)**

**2017 To- Be-Determined (continued)**

<b>To-Be-Determined</b>	<b>Title and Description</b>	<b>Type of Rulemaking</b>
<p align="center">1111</p> <p align="center">1111.1</p>	<p><b>Reduction of NOx Emissions from Natural Gas Fired, Fan-Type Central Furnaces</b></p> <p>Rule 1111 may be amended to address compliance challenges.</p> <p><b>Reduction of NOx Emissions from Natural Gas Fired Commercial Furnaces (CMB-01)</b></p> <p>Proposed Rule 1111.1 will establish equipment-specific nitrogen oxides emission limits and other requirements for the operation of commercial space heaters.</p> <p align="right"><i>Tracy Goss 909.396.3106 CEQA and Socio: Jillian Wong 909.396.3176</i></p>	<p align="center">AQMP</p>
<p align="center">1123<sup>+</sup></p>	<p><b>Refinery Process Turnarounds (MCS-03)</b></p> <p>Proposed amendments will implement Control Measure MSC-03 of the 2007 AQMP by establishing procedures that better quantify emission impacts from start-up, shutdown or turnaround activities.</p> <p align="right"><i>Ian MacMillan 909.396.3244 CEQA and Socio: Jillian Wong 909.396.3176</i></p>	<p align="center">AQMP</p>
<p align="center">1135</p>	<p><b>Emissions of Oxides of Nitrogen from Electric Power Generating Systems</b></p> <p>At the December 4, 2015 Board meeting, Rule 2001 - Applicability was amended, allowing for an off-ramp from the NOx RECLAIM program for electricity generating facilities (EGF) operating at Best Available Control Technology (BACT) or Best Available Retrofit Control Technology (BARCT) NOx emission levels. Any EGF that opts out of the NOx RECLAIM program will need to comply with the proposed amendments to Rule 1135 – Emissions of Oxides of Nitrogen from Electric Power Generating Systems. The primary purpose of these proposed amendments is for the EGF facility to maintain compliance with the NOx RECLAIM emission limits. The EGF owner or operator would need to comply with the newly developed Rule 1135 source-specific requirements no later than three years after approval of their Rule 2001 opt-out plan.</p> <p align="right"><i>Tracy Goss 909.396.3106 CEQA and Socio: Jillian Wong 909.396.3176</i></p>	<p align="center">Other</p>

**2017 MASTER CALENDAR (continued)**

**2017 To-Be-Determined (continued)**

<b>To-Be-Determined</b>	<b>Title and Description</b>	<b>Type of Rulemaking</b>
1136 <sup>*,+</sup>  1450 <sup>*</sup>	<p><b>Wood Products Coatings (CTS-02)</b> Amendments may be proposed to existing rule limits and other provisions.</p> <p><b>Control of Methylene Chloride Emissions</b> The proposed rule is to reduce exposure to methylene chloride from furniture stripping, remove potential regulatory loopholes, achieve emission reductions where possible and cost effective, include reporting requirements, and clarify the rule language to improve consistency with other SCAQMD VOC rules.</p> <p><i>Philip Fine 909.396.2239 CEQA and Socio: Jillian Wong 909.396.3176</i></p>	AQMP  Toxics
1142	<p><b>Marine Tank Vessel Operations</b> Revisions to Rule 1142 are proposed to address VOC emissions from marine tank vessel operations and provide clarifications.</p> <p><i>Ian MacMillan 909.396.3244 CEQA and Socio: Jillian Wong 909.396.3176</i></p>	Other
1146, 1146.1, 1146.2 <sup>*,+</sup>	<p><b>Emissions of Oxides of Nitrogen</b> Amendments to Rules 1146, 1146.1, and 1146.2 may be necessary to respond to advancements in ultra-low NOx burner technology and selective catalytic reduction (SCR) applicability.</p> <p><i>Tracy Goss 909.396.3106 CEQA and Socio: Jillian Wong 909.396.3176</i></p>	Other
1148.1 1148.2	<p><b>Oil and Gas Production Wells</b></p> <p><b>Notification and Reporting Requirements for Oil and Gas Wells and Chemical Suppliers</b> Amendments to Rule 1148.2 may be needed to address community notification procedures, the inclusion of water injection wells, and potentially other measures based on an evaluation of information collected since the last rule adoption.</p> <p><i>Ian MacMillan 909.396.3244 CEQA and Socio: Jillian Wong 909.396.3176</i></p>	Other
1150.1	<p><b>Control of Gaseous Emissions from Municipal Solid Waste Landfills</b> Proposed amendments will address U.S. EPA revisions to the Standards of Performance for Municipal Solid Waste Landfills (NSPS) and Existing Guidelines and Compliance Timelines (EG) for Municipal Solid Waste Landfills, as well as CARB GHG requirements.</p> <p><i>Ian MacMillan 909.396.3244 CEQA and Socio: Jillian Wong 909.396.3176</i></p>	Other

**2017 MASTER CALENDAR (continued)**

**2017 To-Be-Determined (continued)**

<b>To-Be-Determined</b>	<b>Title and Description</b>	<b>Type of Rulemaking</b>
1151	<p><b>Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations</b></p> <p>Depending on the final recommendations of the tBAC white paper and the actions of the Scientific Review Panel for the Office of Environmental Health Hazard Assessment (OEHHA), reassessment of the limited tBAC exemption in the Rule will occur.</p> <p><i>Philip Fine 909.396.2239 CEQA and Socio: Jillian Wong 909.396.3176</i></p>	Other
1173 <sup>+</sup>	<p><b>Control of Volatile Organic Compound Leaks and Releases from Components at Petroleum Facilities and Chemical Plants</b></p> <p>Proposed revisions to Rule 1173 are being considered based on recent U.S. EPA Regulations and CARB's oil and gas regulations.</p> <p><i>Ian MacMillan 909.396.3244 CEQA and Socio: Jillian Wong 909.396.3176</i></p>	Other
1177 <sup>+</sup>	<p><b>Liquefied Petroleum Gas Transfer and Dispensing (2012 AQMP FUG-02)</b></p> <p>Potential amendments may be proposed to include additional sources of emissions from the dispensing and transfer of LPG.</p> <p><i>Philip Fine 909.396.2239 CEQA and Socio: Jillian Wong 909.396.3176</i></p>	AQMP
1188 <sup>+</sup>	<p><b>VOC Reductions from Vacuum Trucks (FUG-01)</b></p> <p>The proposed rule will establish VOC emission standards and other requirements associated with the operation of vacuum trucks not covered by Rule 1149 – Storage Tank and Pipeline Cleaning and Degassing.</p> <p><i>Ian MacMillan 909.396.3244 CEQA and Socio: Jillian Wong 909.396.3176</i></p>	AQMP
1190, 1191, 1192, 1193, 1194, 1195, 1196, and 1186.1	<p><b>Fleet Vehicle Requirements</b></p> <p>Amendments to Rule 1190 series fleet rules may be necessary to address implementation. In addition, the current fleet rules may be expanded to achieve additional air quality and air toxic benefits.</p> <p><i>Dean Saito 909.396.2647 CEQA and Socio: Jillian Wong 909.396.3176</i></p>	Other

**2017 MASTER CALENDAR (continued)**

**2017 To-Be-Determined (continued)**

To-Be-Determined	Title and Description	Type of Rulemaking
<p>1304.2</p> <p>1304.3</p>	<p><b>California Public Utilities Commission Regulated Electrical Local Publicly Owned Electrical Utility Fee for Use of SO<sub>x</sub>, PM<sub>10</sub> and NO<sub>x</sub> Offsets</b></p> <p><b>Local Publicly Owned Electrical Generating Facility Fee for Use of SO<sub>x</sub>, PM<sub>10</sub> and NO<sub>x</sub> Offsets</b></p> <p>Proposed Rules 1304.2 and 1304.3 would allow new greenfield facilities and additions to existing electrical generating facilities conditioned access to SCAQMD internal offset accounts for a fee, for subsequent funding of qualifying improvement projects consistent with the AQMP.</p> <p>Proposed Rule 1304.2 will provide offsets so that new, proposed and other existing electrical generating facilities can compete on a level playing field with existing generating facilities with utility steam boilers, and implement the State’s plan to maintain grid reliability.</p> <p>Proposed Rule 1304.3 will provide offsets so that new, proposed and other existing electrical generating facilities run by local municipalities can meet the electricity reliability needs of their customers.</p> <p><i>Tracy Goss 909.396.3106 CEQA and Socio: Jillian Wong 909.396.3176</i></p>	<p>Other</p> <p>Other</p>
<p>1470*</p>	<p><b>Requirement for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines at Sensitive Receptors</b></p> <p>The proposal would address new and existing small (<math>\leq 50</math> brake horsepower) diesel engine emissions located near sensitive receptors such as schools, preschools, daycare centers and health care facilities. Staff is also considering amendments to minimize use of stationary diesel back-up engines that may include use of alternative power sources that are substantially less polluting.</p> <p><i>Ian MacMillan 909.396.3244 CEQA and Socio: Jillian Wong 909.396.3176</i></p>	<p>Toxics</p>
<p>Reg. XVI</p>	<p><b>Mobile Source Offset Programs</b></p> <p>Amendments to various Regulation XVI rules will be proposed to address the recent U.S. EPA proposed disapproval of such rules including Rule 1610.</p> <p><i>Henry Hogo 909.396.3184 CEQA and Socio: Wong 909.396.3176</i></p>	<p>Other</p>



## 2017 MASTER CALENDAR (continued)

### 2017 To-Be-Determined (continued)

To-Be-Determined	Title and Description	Type of Rulemaking
Reg. XVII	<p><b>Prevention of Significant Deterioration</b>  Proposed amendments to Regulation XVII will align the SCAQMD's Prevention of Significant Deterioration program with federal requirements.</p> <p><i>Carol Gomez 909.396.3264 CEQA and Socio: Jillian Wong 909.396.3176</i></p>	Other
1902	<p><b>Transportation Conformity</b>  Amendments to Rule 1902 may be necessary to bring the District's Transportation Conformity rule in line with current U.S. EPA requirements.</p> <p><i>Ian MacMillan 909.396.3244 CEQA and Socio: Jillian Wong 909.396.3176</i></p>	Other
1905	<p><b>Pollution Controls for Automotive Tunnel Vents</b>  This proposed rule would address emissions from proposed roadway tunnel projects that could have air quality impacts.</p> <p><i>Ian MacMillan 909.396.3244 CEQA and Socio: Jillian Wong 909.396.3176</i></p>	Other
Reg. XXIII	<p><b>Emissions Growth Management of Various Emissions Sources</b>  Regulation XXIII will contain rules related to emissions growth management of various emission sources including, but not limited to, new or redevelopment projects and other sources where criteria pollutant emissions associated with the region's growth may cause or exacerbate exceedance of an air quality standard. Proposed rule(s) will implement the 2007 AQMP Control Measure EGM-01 – Emission Reductions from New or Redevelopment Projects and potential implementation of EGM-01 in the 2016 AQMP. Regulation XXIII may include other sources as provided in the Final 2016 AQMP to be submitted to U.S. EPA.</p> <p><i>Henry Hogo 909.396.3184 CEQA and Socio: Jillian Wong 909.396.3176</i></p>	AQMP

**2017 MASTER CALENDAR (continued)**

**2017 To-Be-Determined (continued)**

<b>To-Be-Determined</b>	<b>Title and Description</b>	<b>Type of Rulemaking</b>
Reg. XXV	<p><b>On-Road and Off-Road Mobile Source Credit Generation Programs</b></p> <p>Regulation XXV will contain rules to allow generation of criteria pollutant mobile source emission reduction credits (MSERCs) from various on-road and off-road sources, such as on-road heavy-duty trucks, off-road equipment, locomotives, and marine vessels. Credits will be generated by retrofitting existing engines or replacing the engines with new lower- emitting or zero-emission engines. The Draft 2016 AQMP proposed limiting use of MSERCs to facilities where the mobile source emissions occur.</p> <p><i>Henry Hogo 909.396.3184 CEQA and Socio: Jillian Wong 909.396.3176</i></p>	AQMP
Reg. XXVII	<p><b>Climate Change</b></p> <p>Changes may be needed to Regulation XXVII to add or update protocols for GHG reductions, and other changes.</p> <p><i>Philip Fine 909.396.2239 CEQA and Socio: Jillian Wong 909.396.3176</i></p>	Other
Reg. II, IV, XI, XIII, XIV, XX , XXX and XXXV Rules	<p>Various rule amendments may be needed to meet the requirements of state and federal laws, implement OEHHA revised risk assessment guidance, address variance issues/ technology-forcing limits, to abate a substantial endangerment to public health or welfare, or to seek additional reductions to meet the SIP short-term measure commitment. The associated rule development or amendments include, but are not limited to, SCAQMD existing rules, new or amended rules to implement the 2012 or 2016 AQMP measures. This includes measures in the 2010 Clean Communities Plan (CCP) or 2016 AQMP to reduce toxic air contaminants or reduce exposure to air toxics from stationary, mobile, and area sources. Rule amendments may include updates to provide consistency with CARB Statewide Air Toxic Control Measures or U.S. EPA’s National Emission Standards for Hazardous Air Pollutants.</p>	Other

BOARD MEETING DATE: June 2, 2017

AGENDA NO. 18

**PROPOSAL:** Status Report on Major Ongoing and Upcoming Projects for Information Management

**SYNOPSIS:** Information Management is responsible for data systems management services in support of all SCAQMD operations. This action is to provide the monthly status report on major automation contracts and planned projects.

**COMMITTEE:** Administrative, May 12, 2017; Recommended for Approval

**RECOMMENDED ACTION:**  
Receive and file.

Wayne Nastri  
Executive Officer

JCM:MAH:OSM:agg

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### **Background**

Information Management (IM) provides a wide range of information systems and services in support of all SCAQMD operations. IM's primary goal is to provide automated tools and systems to implement Board-approved rules and regulations, and to improve internal efficiencies. The annual Budget specifies projects planned during the fiscal year to develop, acquire, enhance, or maintain mission-critical information systems.

### **Summary of Report**

The attached report identifies each of the major projects/contracts or purchases that are ongoing or expected to be initiated within the next six months. Information provided for each project includes a brief project description and the schedule associated with known major milestones (issue RFP/RFQ, execute contract, etc.).

### **Attachment**

Information Management Status Report On Major Ongoing and Upcoming Projects During the Next Six Months

**ATTACHMENT**  
**June 2, 2017 Board Meeting**  
**Information Management Status Report On Major Ongoing and**  
**Upcoming Projects During the Next Six Months**

<b>Project</b>	<b>Brief Description</b>	<b>Budget</b>	<b>Completed Actions</b>	<b>Upcoming Milestones</b>
Website Evaluation & Improvements	Conduct a detailed review of the SCAQMD website to identify improvements/enhancements that can further site usability and implement the items approved by the Administrative Committee; improvements include a new custom calendar and changes to the navigation and content organization	\$117,475	<ul style="list-style-type: none"> <li>• Calendar development done</li> <li>• Home page development done</li> <li>• Development of master pages and widgets done</li> <li>• Beta site set up on SCAQMD server</li> </ul>	<ul style="list-style-type: none"> <li>• Content migration and page updates with new widgets on the beta site</li> <li>• Final testing and performance tuning of new site in July 2017</li> <li>• Expect to deploy July/August 2017</li> </ul>
Consolidation of Mapping Functions on SCAQMD's Website	Conduct an assessment of Geographic Information System (GIS) needs across the agency and develop an implementation plan for consolidating GIS functionality across the agency with a road map of projects to reach that goal	\$49,936	<ul style="list-style-type: none"> <li>• Needs assessment completed</li> <li>• Final system design document done based on recommended system design</li> <li>• Implementation plan outline done after final design documents</li> <li>• Software quote received from ESRI</li> </ul>	<ul style="list-style-type: none"> <li>• Post-contract, IM will begin implementing recommendations and incorporating into improved website</li> <li>• June Board letter to purchase recommended hardware and software</li> </ul>
Permitting Systems Automation	<ul style="list-style-type: none"> <li>• New Web Application Development project to automate the 400A Form Filing process</li> </ul>	\$200,000	<ul style="list-style-type: none"> <li>• Business process model, requirements, and design work complete</li> <li>• 400 A release 1 delivered end of April</li> </ul>	<ul style="list-style-type: none"> <li>• Code development work in progress</li> <li>• Testing in progress</li> </ul>

Permitting Systems Automation (continued)	<ul style="list-style-type: none"> <li>• New Web Application Development project to automate the processing of Dry Cleaner, Gas Station, and Spray Booth applications</li> <li>• Bay Area Software Evaluation - Assist Permitting Systems staff in assessment of the Bay Area software solution for use by SCAQMD and the public</li> </ul>	<p>\$250,000</p> <p>To Be Determined</p>	<ul style="list-style-type: none"> <li>• Business process model, requirements, and design work complete</li> <li>• Release 1 of Dry Cleaner, Gas Station, and Spray Booth modules delivered mid-May</li> </ul> <p>Received test account from Bay Area to access the demo site and experiment with the BAAQMD online permit processing tools</p>	<ul style="list-style-type: none"> <li>• Code development work in progress for all modules</li> <li>• Testing in progress for all modules</li> </ul> <p>Complete initial review of Internal Dashboard and Customer Service Portals; need test facility to move forward</p>
Information Technology Review	RFP for Information Technology review to help determine opportunities for hardware, system, and software modernization	\$75,000	<ul style="list-style-type: none"> <li>• Released RFP December 2, 2016</li> <li>• Contract awarded March 3, 2017 and executed in May</li> </ul>	Task 1: Develop review scope, deliver work plan, and start implementation
Permit Dashboard Statistics	<ul style="list-style-type: none"> <li>• High level: New dashboard displaying monthly count of pending applications by type</li> </ul>	Costs unbudgeted, developed internally; cost of software \$1,320	<ul style="list-style-type: none"> <li>• Dashboard developed internally and submitted for review and approval October 2016</li> <li>• Initial version completed and went live online on January 20, 2017</li> </ul>	Not applicable

Permit Dashboard Statistics (continued)	<ul style="list-style-type: none"> <li>Detailed: New Web Application to allow engineers to update the intermediate status of applications, and a modification of the FIND or other GIS application to display the updated status to the applicant</li> </ul>	Costs unbudgeted, to be determined after requirements are known	Initial requirements meeting Aug. 2016; staff identifying and finalizing intermediate statuses, method of data capture, and other user requirements	Continued biweekly follow-up to obtain user requirements needed for design and development work
Network Core Switch and Router Replacement	Replace the existing voice and data network core switch and router, which is no longer fully supported by the manufacturer; the new core switch and router will deliver enhanced functionality with additional bandwidth and speed	\$225,000	<ul style="list-style-type: none"> <li>Released RFP October 7, 2016</li> <li>Awarded contract January 6, 2017 and equipment ordered</li> <li>Router installed, configured and tested</li> </ul>	Not applicable
Agenda Tracking System Replacement	Replace the aging custom agenda tracking system with a state-of-the-art, cost-effective Enterprise Content Management (ECM) system, which is fully integrated with OnBase, SCAQMD's agency-wide ECM system	\$86,600	<ul style="list-style-type: none"> <li>Released RFP December 4, 2015</li> <li>Awarded contract April 1, 2016</li> </ul>	Complete implementation August 2017
Replace Your Ride	New Web Application to allow residents to apply for incentives to purchase newer, less-polluting vehicles	\$175,000	<ul style="list-style-type: none"> <li>Task order issued and awarded October 2016</li> <li>Development work initiated December 2016</li> <li>Release 1-application filing module delivered for testing</li> </ul>	<ul style="list-style-type: none"> <li>System development work in progress</li> <li>Expected implementation June 2017</li> </ul>
Emission Reporting System	Upgrade the outdated modem-based emission reporting system to allow internet-based reporting with up-to-date tools and methodology	\$242,000	<ul style="list-style-type: none"> <li>Detailed planning and architecture sessions completed</li> <li>Approved by the Board March 3, 2017</li> </ul>	Task order set to start

Web Application and CLASS Systems Maintenance and Support	On-demand support for minor enhancements, upgrades, and maintenance of the SCAQMD suite of CLASS systems and Web Applications, Web Services, and Web Application Program Interfaces (APIs)	\$103,000	<ul style="list-style-type: none"> <li>• Planning sessions in progress to finalize and prioritize work items for the upcoming period</li> <li>• Approved by the Board March 3, 2017</li> </ul>	Task order set to start
Air Quality Index Rewrite and Migration	Develop a new Web Service and/or Web API to migrate the Air Quality Index function from the FORTRAN computer to STA's data management system	\$60,000	<ul style="list-style-type: none"> <li>• Work statement completed</li> <li>• Approved by the Board March 3, 2017</li> <li>• Task order awarded and work started in April</li> <li>• Requirements and design work completed in May</li> </ul>	Development work in progress
Renewal of HP Server Maintenance & Support	Purchase of maintenance and support services for servers and storage devices	\$110,000	<ul style="list-style-type: none"> <li>• Approved by the Board April 7, 2017</li> <li>• Contract executed</li> </ul>	Not applicable

BOARD MEETING DATE: June 2, 2017

AGENDA NO. 20

REPORT: Administrative Committee

SYNOPSIS: The Administrative Committee met on Friday, May 12, 2017. The Committee discussed various issues detailed in the Committee report. The next Administrative Committee meeting is scheduled for Friday, June 9, 2017 at 10:00 a.m.

RECOMMENDED ACTION:  
Receive and file.

Dr. William A. Burke, Chair  
Administrative Committee

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**Attendance:** Attending the May 12, 2017 meeting via videoconference were Committee Chair Dr. William Burke and Committee Members Judith Mitchell and Dr. Clark E. Parker, Sr. Committee Vice Chair Ben Benoit was absent.

**ACTION/DISCUSSION ITEMS:**

1. **Board Members' Concerns:** None to report.
2. **Chairman's Report of Approved Travel:** As noted on the travel report, Councilmember Mitchell will attend the monthly CARB Board meeting in Sacramento, May 25-26, 2017.
3. **Approval of Compensation for Board Member Assistant(s)/Consultant(s):** None to report.
4. **Report of Approved Out-of-Country Travel:** None to report.
5. **Website Improvement Project:** Deputy Executive Officer/Chief Administrative Officer Michael O'Kelly reported that the current website format was created in 2012, as an improvement over the previous website. Additional



improvements were requested by the Board, the public and stakeholder groups. The website receives approximately 2.8 million page views every year, with the following pages being the majority viewed: Home, FIND, the current air quality map, rulebook, and careers. Assistant Deputy Executive Officer/Information Management Chris Marlia proceeded to provide a demonstration of the new website. Most notable is that the navigation on the Home Page has changed from a vertical to horizontal navigation. Dr. Burke requested that Mr. Marlia demonstrate how to locate the May 5, 2017 Board meeting webcast. Mr. O'Kelly responded that the content migration isn't fully complete, making it difficult to display the May 5, 2017 Board meeting webcast. Dr. Burke requested that Mr. Marlia return to the Committee when the new website is fully migrated. Mr. O'Kelly reported that the purpose of the demonstration is to obtain comments on the feel and look of the website improvements since the content migration has not been completed. Dr. Burke commented that this is a huge step forward, but it needs to be made easy for general public use. Mr. Marlia reported that the calendar of events is now designed to make it easier and quicker to obtain additional information regarding a specific event. Executive Officer Wayne Nastri recommended adding a webcast button to eliminate multiple clicks to access webcasts. (No motion required.)

6. **Status Report on Major Ongoing and Upcoming Projects for Information Management:** Mr. O'Kelly reported that the status report includes past and future Information Management projects. All projects are progressing forward as expected.

Moved by Mitchell; seconded by Parker, unanimously approved.

Ayes: Mitchell, Dr. Parker, Dr. Burke  
Noes: None  
Absent: Benoit

7. **Transfer Funds and Issue Purchase Orders for Necessary Software and Hardware to Develop an Enterprise Geographical Information Systems:** Mr. O'Kelly reported that this item is requesting authority to purchase licenses for Esri software and two load balancers that distribute the load within the internal Cloud when data requests are received. Dr. Parker commented that if switches are being used with 50 or more users at the same time, the technology fails; he further recommended that when dealing with new technologies to ensure that many users can be accommodated. Dr. Burke asked for the maximum number of users that have tried to access the website at one time. Mr. O'Kelly responded 35,000.

Moved by Mitchell; seconded by Parker, unanimously approved.

Ayes: Mitchell, Dr. Parker, Dr. Burke  
Noes: None  
Absent: Benoit

8. **Adopt Executive Officer's FY 2017-18 Proposed Goals and Priority Objectives, Draft Budget and Proposed Amended Regulation III - Fees:** The draft budget includes a fee increase for Title V sources of 32% (16% and 16% over a two-year period), and an 8% fee increase in non-Title V sources (4% and 4% over a two-year period). The two-year phase-in is in accordance with the Health & Safety Code. The hearing is set for June where there will be a more detailed discussion. Dr. Burke inquired if Mr. Nastri was okay with the draft budget. Mr. Nastri responded that the Goals and Objectives are acceptable, but staff have initiated revisions to the mission statement for Board consideration. Dr. Parker inquired if Supervisor Janice Rutherford's concerns were addressed in the revised Mission Statement. Mr. Nastri responded yes, and stated that the revised Mission Statement addresses the concerns expressed at the Budget workshop. The challenge is that a mission statement should be succinct and people should be able to readily understand it. Dr. Burke commented that the concerns addressed at the Budget workshop are not the views of the entire Board. Mr. Nastri concurred. Rita Loof, Radtech International, commented that her company will be submitting comments. (No motion required.)
9. **Report of RFPs Scheduled for Release in June:** Mr. O'Kelly reported that this item is requesting authority to issue RFQs for purchase of various gases for the laboratory. (No motion required.)

Moved by Parker; seconded by Mitchell, unanimously approved.

Ayes: Mitchell, Dr. Parker, Dr. Burke  
Noes: None  
Absent: Benoit

10. **Transfer and Appropriate Funding, Execute Contract, Authorize Release of RFQ and Issue Purchase Orders:** Assistant Deputy Executive Officer/Science & Technology Advancement Jason Low reported that this item includes several actions, and the first is to transfer and appropriate money to the PM2.5 program to upgrade the laboratory weighing room, as well as to purchase two continuous PM monitors for the field. The second recommended action is to appropriate funding and release an RFQ for mobile air monitoring platforms in an amount not to exceed \$118,000; and the last recommended action is to realign the budget for an enhanced particulate monitoring program of up to \$230,000.

Moved by Mitchell; seconded by Parker, unanimously approved.

Ayes: Mitchell, Dr. Parker, Dr. Burke  
Noes: None  
Absent: Benoit

11. **Extend Contract for Targeted YouTube Videos and Banner Ads for the 2017-18 Check Before You Burn Program:** Media Manager Sam Atwood reported this item proposes a \$250,000 expenditure for Google advertising, principally banner ads and YouTube pre-roll, to help promote the 2017-2018 Check Before You Burn (CBYB) campaign which begins on November 1. The campaign with Google is meant to complement a local outreach campaign for which the Board just approved a contract at May's Board meeting. Google has been highly effective at reaching our target users. The 2016-2017 CBYB Google campaign achieved over 110 million impressions (which means how many times an ad appeared on a device); and also achieved were over 2.9 million interactions (meaning when someone clicked on an ad). The cost has been estimated at 7 cents per action.

Moved by Parker; seconded by Mitchell, unanimously approved.

Ayes: Mitchell, Dr. Parker, Dr. Burke  
Noes: None  
Absent: Benoit

12. **Establish List of Prequalified Counsel to Represent and Advise the SCAQMD on Legal Matters Related to Environmental Law and a List to Represent and Advise the SCAQMD Hearing Board:** Chief Deputy Counsel Barbara Baird reported that staff would like to withdraw this item and bring it back to the Administrative Committee in June, 2017 (no vote required).
13. **Appropriate Funds and Authorize Amending Contracts with Outside Counsel and Specialized Legal Counsel and Services:** Ms. Baird reported that this item is to request budget augmentation for outside legal counsel expenses for April, May and June of 2017 in the amount of \$250,000. The last two years, \$300,000 was spent on the Phillips 66 litigation defending SCAQMD's CEQA document and that money will be reimbursable by the refinery at the time litigation is over. The time window for environmental parties to seek review from the California Supreme Court expires mid-May, with reimbursement monies received shortly if they do not seek review or if it gets denied by the Supreme Court.

Moved by Mitchell; seconded by Parker, unanimously approved.

Ayes: Mitchell, Dr. Parker, Dr. Burke  
Noes: None  
Absent: Benoit

14. **Local Government & Small Business Assistance Advisory Group Minutes for the February 10, 2017 Meeting:** Deputy Executive Officer/Legislative, Public Affairs & Media Derrick Alatorre reported that this item is a written report.
15. **Review June 2, 2017 Governing Board Agenda:** None to report.
16. **Other Business:**  
There was no other business.
17. **Public Comment:** None to report.  
There were no public comments

Meeting adjourned at 10:32 a.m.

**Attachment**

Local Government & Small Business Assistance Advisory Group Minutes for the February 10, 2017 Meeting



# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178  
(909) 396-2000 • www.aqmd.gov

## LOCAL GOVERNMENT & SMALL BUSINESS ASSISTANCE ADVISORY GROUP FRIDAY FEBRUARY 10, 2017 MEETING MINUTES

### MEMBERS PRESENT:

Ben Benoit, Mayor Pro Tem, City of Wildomar and LGSBA Chairman  
Geoffrey Blake, Metal Finishers of Southern California/All Metals  
Todd Campbell, Clean Energy  
LaVaughn Daniel, DancoEN  
John DeWitt, JE DeWitt, Inc.  
Bill LaMarr, California Small Business Alliance  
Rita Loof, RadTech International  
Cynthia Moran, Council Member, City of Chino Hills  
David Rothbart, Los Angeles County Sanitation District

### MEMBERS ABSENT:

Janice Rutherford, Supervisor, Second District, San Bernardino County  
Felipe Aguirre  
Paul Avila, P.B.A. & Associates  
Maria Elena Kennedy, Kennedy Communications

### OTHERS PRESENT:

Mark Abramowitz, Board Consultant (*Lyou*)  
Ruthanne Taylor-Berger, Board Consultant (*Benoit*)  
Mark Taylor, Board Consultant (*Rutherford*)

### SCAQMD STAFF:

Derrick Alatorre, Deputy Executive Officer  
Henry Hogo, Assistant Deputy Executive Officer  
Fabian Wesson, Assistant Deputy Executive Officer/Public Advisor  
Nancy Feldman, Principal Deputy District Counsel  
Tracy Goss, Planning & Rules Manager  
Kathryn Higgins, Program Supervisor  
Elaine Joy Hills, AQ Inspector II  
Lori Langrell, Secretary

### Agenda Item #1 - Call to Order/Opening Remarks

Chair Ben Benoit called the meeting to order at 11:30 a.m.

## **Agenda Item #2 – Approval of January 13, 2017 Meeting Minutes/Review of Follow-Up/Action Items**

Chair Benoit called for approval of the January 13, 2017 meeting minutes. The Minutes were approved unanimously.

## **Agenda Item #3 – Follow Up/Action Items**

Mr. Derrick Alatorre indicated that pursuant to Ms. Rita Loof's request for a BARCT presentation, we have reached out to staff, and will try to present in either March or April.

## **Agenda Item #4 – Update on the SCAQMD Clean Fleet Vehicle Rules**

Mr. Henry Hogo provided an overview of the SCAQMD's regulatory authority for in-use-on-road fleet vehicle regulations, and an update on the implementation of SCAQMD Clean Fleet Vehicle Rules.

Mr. Geoff Blake asked how you fuel if you want to drive up the coast. Mr. Hogo responded that there are compressed natural gas (CNG) stations all the way to Washington, along the highway corridor.

Mr. John DeWitt inquired where funding comes from. Mr. Hogo indicated it is through a settlement with manufacturers. Mr. DeWitt further asked what the cost was to businesses and taxpayers. Mr. Hogo provided an example of City of Los Angeles trash trucks. The city budgets for alternative fuel trucks and seeks approval, while also looking for public funding to offset the cost. From the public side, we have funding through the Carl Moyer program and Mobile Source Review Committee (MSRC), which provides typically \$5 million per year for on road trucks. Similarly, MSRC matching through AB2766, provides \$2 million. There are fleets that purchase natural gas through public funding.

Mr. Bill LaMarr commented that in the definition you are calling these low-emission vehicles, but you are talking about heavy-duty vehicles, and Supervisor Kuehl mentioned in her amendment to the Air Quality Management Plan (AQMP) that she wants to accelerate the purchase and use of zero-emission, heavy-duty vehicles. Mr. LaMarr asked if Supervisor Kuehl is talking about the same low-emitting vehicles. Mr. Hogo replied he is speaking of the definition, not of the amendment itself.

Mr. Rothbart indicated that in his experience with essential public services, they need to be able to respond to an emergency without limitations. For example, the public does not like sewage going into the streets, and we need to respond with a functioning vacuum truck that is reliable. CNG works very well, and we are converting slowly, but if we have a remote emergency, how do I fuel? We have three (3) refueling stations, but we still need to be able to provide this necessary service. Mr. Hogo replied that the fleet rule recognized that commercially there needs to be the ability to operate under certain routes and situations, that a number of vehicles are to remain diesel-powered, and we work closely on the implementation of that.

Ms. Loof asked how this is going to play out in the future context of the AQMP. Mr. Hogo replied that there is talk of expanding the fleet rules to private entities, and fleet rules for the public sector is actually moving forward, with near-zero, commercially available vehicles. Near-zero natural gas is available, with funding being provided through MSRC to help offset the cost.

Mr. Rothbart inquired with the encouragement to update and upgrade, what is the ripple effect on small businesses as the bills must be paid and you have to upgrade the facilities? Are the fees then passed on to rate payers? Mr. Hogo indicated it will translate into higher fees. Mr. Alatorre indicated it will affect small businesses and residents as well.

Ms. Loof asked, in the context of the fleet rule, if the staff analysis will show the costs passed on to the consumer, as well as the life cycle analysis of the costs. Mr. Hogo replied that the AQMP proposal is to work with industry and look for the ability to accelerate turnover to near-zero and zero-emission technologies. Funding is made available as it is a mandate, and industry is getting interested in working with staff. Chair Benoit commented when a rule comes before the Governing Board, there is a socioeconomic study done on the rule for the overall cost, which we have been doing on every rule that comes across.

Mr. DeWitt asked if cost is measured after the fact. Mr. Hogo indicated not for fleet rules.

Mr. Rothbart inquired pertaining to the health and safety code listed, given the Supreme Court ruling, and looking at advancing technology in the bigger picture of reducing emissions, as the heavy duty on-road trucks were not analyzed, if there is a thought at taking another stab at it. Mr. Hogo replied that in spanning to private fleets we need to get a waiver from the US EPA.

#### **Agenda Item #5 – Status Report on Rule 1147 Technology Assessment**

Mr. Tracy Goss provided an update on the Technology Assessment for Rule 1147: NOx Reductions from Miscellaneous Sources.

Mr. LaMarr asked about the 3,400 spray booths and eight (8) prep stations mentioned, if they were auto body shops. Mr. Goss replied that they include both auto body and manufacturing facilities, but the majority are auto body shops. Mr. Goss can provide a breakdown from staff. Mr. LaMarr further asked in regards to Handbill Printers, if they will be able to get some relief, and if they will have to go through new source review. Mr. Goss responded that we can work with them, especially if they emit less than a pound per day. We have provided in the rules recordkeeping options, but they will still have to go through the permitting process.

Ms. Loof asked about the 3,400 spray booths and 1,500 small ovens where the afterburners were mentioned, if the 0.9 tons per day of NOx emissions included the emissions from the afterburners. Ms. Loof also asked if there were calculations done for particulate matter (PM) emissions. Mr. Goss indicated yes regarding the emissions from the afterburners, and that he was not sure about PM emissions; however, the calculations were focused on NOx.

#### **Agenda Item #6 – Implementation of AB 2766 Requirements**

Ms. Kathryn Higgins provided an overview of the FY 2014-15 AB2766 Subvention Fund Program emission reduction and financial activity reported by participating local governments.

Ms. Loof asked for some examples of the public education projects. Ms. Higgins indicated that the public education projects were mostly implemented as joint projects with Councils of Governments, such as Clean Cities projects in Riverside, and some extend and align with CicLaVia-type projects, where the information is provided to, not only to their employers, but also to the public and students.

#### **Agenda Item #7 –Monthly Report on Small Business Assistance Activities**

No comments.

**Agenda Item #8 - Other Business**

Ms. Loof indicated that she just noticed a typo on page three of the approved minutes, instead of layer, it should say LAER. Chair Benoit indicated since the change is typographical and not changing content, the change will be made.

**Agenda Item #9 - Public Comment**

No comments.

**Adjournment**

The meeting adjourned at 12:47 p.m.



BOARD MEETING DATE: June 2, 2017

AGENDA NO. 21

REPORT: Investment Oversight Committee

SYNOPSIS: The Investment Oversight Committee met Friday, May 19, 2017 and discussed various issues detailed in the Committee report. The next Investment Oversight Committee meeting is scheduled for Friday, November 17, 2017 at 12:00 noon in Conference Room CC2.

RECOMMENDED ACTION:  
Receive and file this report.

Dr. Joseph K. Lyou, Acting Chair  
Investment Oversight Committee

MBO:lg

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**Attendance:** Present at SCAQMD were Acting Chair Dr. Joseph K. Lyou and Committee Members Gary Burton and Brent Mason. Committee Members Michael Cacciotti and Shawn Nelson attended by teleconference. Absent were Committee Vice Chair Dr. William Burke and Committee Member Richard Dixon.

**Investment Committee Discussion Items:**

*Quarterly Report of Investments:* The Committee reviewed the quarterly investment report that was provided to the Board. For the month of March 2017, the SCAQMD's weighted average yield on total investments of \$614,160,435.93 from all sources was 1.20%. The allocation by investment type was 89.51% in the Los Angeles County Pooled Surplus Investment Fund (PSI) and 10.49% in the State of California Local Agency Investment Fund (LAIF) and Special Purpose Investments (SPI). The one-year Treasury Bill rate as of March 31, 2017 was 1.03%.

*Cash Flow Forecast:* Michael O’Kelly reported on the cash flows for the current year and projected for the next three years. SCAQMD Investment Policy limits its Special Purpose Investments to 75% of the minimum amount of funds available for investment during the Cash Flow Horizon. That limit, which includes all funds (General, MSRC, Clean Fuels), is \$182.4 million. Current Special Purpose Investments are well below the maximum limit while investment opportunities are continuously analyzed, taking into account safety, liquidity, and yield within the current market environment. Mr. O’Kelly noted that the approximately \$4 million SBCERA contribution rate increase was included in the cash flow forecast.

*Financial Market Update:* Henry Sun from PFM Asset Management provided the Committee with information on current investment markets, economic conditions, and the overall outlook. He presented market information on increased short-term Treasury yields following the Federal Reserve’s decision to hike rates in March, long-term yield curves remaining flat with future inflation expectations, and a 99% chance of the Federal Reserve raising rates at their June meeting. Economic indicators were also presented showing below-expected first quarter growth of 0.7%, increased consumer confidence, continued growth in the labor market, national unemployment rate of 4.4%, slowly increasing inflation of 1.8%, and expectations for gradual increases in the Federal Funds Target Rate.

**Other Business:**

There was no other business.

**Public Comment:**

There were no public comments.

BOARD MEETING DATE: June 2, 2017

AGENDA NO. 22

REPORT: Legislative Committee

SYNOPSIS: The Legislative Committee held a meeting on Friday, May 12, 2017. The next Legislative Committee meeting is scheduled for Friday, June 9, 2017, at 9 a.m.

Agenda Item	Recommendation/Action
AB 378 (C. Garcia) Greenhouse Gases, Criteria Air Pollutants, and Toxic Air Contaminants	Work with Author
AB 890 (Medina) Local Land Use Initiatives: Environmental Review	Watch
AB 1073 (E. Garcia) California Clean Truck, Bus, and Off-Road Vehicle and Equipment Technology Program	Support
AB 1647 (Muratsuchi) Petroleum Refineries: Air Monitoring Systems	Work with Author

RECOMMENDED ACTION:

Receive and file this report, and approve agenda items as specified in this letter.

Judith Mitchell, Chair  
Legislative Committee

DJA:PFC:MJK:jns

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**Attendance [Attachment 1]**

The Legislative Committee met on May 12, 2017. Committee Chair Judith Mitchell and Committee Member Janice Rutherford were present at the SCAQMD's Diamond Bar headquarters. Committee Members Larry McCallon, Shawn Nelson (arrived at 9:27 a.m.), and Dr. Clark E. Parker, Sr. attended via videoconference. Committee Vice-Chair Joe Buscaino was absent.

**Update on Federal Legislative Issues [Attachment 2]**

SCAQMD's federal legislative consultants (Carmen Group, Cassidy & Associates, and Kadesh & Associates) each provided a written report on various key Washington, D.C. issues.

Mr. Gary Hoitsma of the Carmen Group and Mr. Mark Kadesh of Kadesh & Associates gave a verbal update as well.

Mr. Hoitsma reported on President Donald Trump's cabinet appointments, stating that the U.S. Senate confirmed Robert Lighthizer to be the U.S. Trade Representative, thus completing the filling of the 13 cabinet-level appointee positions. Mr. Hoitsma noted that the subcabinet level appointments in the current Administration are proceeding very slowly in comparison to previous administrations, and that his firm is keeping track of the appointments of special interest. Mr. Hoitsma also reported that President Trump named a couple of people to the Federal Energy Regulatory Commission (FERC), including Neil Chatterjee, who was the main energy and environment staffer for Senator Mitch McConnell. Mr. Hoitsma added that Neil Chatterjee had met with several SCAQMD staffers and officials over the past couple of years in Washington, D.C.

Mr. Kadesh reported that President Trump signed the omnibus appropriations legislation, funding the rest of Fiscal Year 2017. As part of the omnibus legislation, the Diesel Emissions Reduction Act (DERA) program received an additional \$10 million in funding beyond last year's \$50 million, bringing the total to \$60 million dollars. Additionally, Mr. Kadesh stated that the Targeted Airshed Grant Program also received an additional \$10 million, bringing it to a total of \$30 million, compared to last year's \$20 million. Mr. Kadesh added that the timing of SCAQMD's trip to D.C. is positive, as the President's budget is expected to be released in the third week of May and coincides with the FY 2018 appropriations process.

Councilmember Mitchell commented that it was good news that there were \$10 million increases in both DERA and Targeted Airshed Grant funding.

#### **Update on State Legislative Issues [Attachment 3]**

SCAQMD's state legislative consultants (Joe A. Gonsalves & Son and Gonzalez, Quintana, Hunter & Cruz, LLC) provided written reports on various key issues in Sacramento.

Mr. Jacob Moss of Gonzalez, Quintana, Hunter & Cruz, LLC and Mr. Paul Gonsalves of Joe A. Gonsalves & Son each gave verbal updates as well.

Mr. Jacob Moss updated the Committee on the May Budget Revise. Mr. Moss stated that the January budget had forecast revenue declines from the previous year of about \$5.8 billion, but because of a surge in the stock market, which increased revenues, the forecast now reflects only a \$3.3 billion dollar drop from the 2016 budget forecast.

Mr. Paul Gonsalves reported that SB 100, the Senate President pro Tem's bill, which focuses on attaining 100 percent renewable energy in the state by 2045, passed out of the Senate Energy, Utilities and Communications Committee, with a vote of 8-2.

## **Recommend Position on State Bills *[Attachment 4]***

### **AB 378 (C. Garcia) Greenhouse Gases, Criteria Air Pollutants, and Toxic Air Contaminants**

Mr. Philip Crabbe, Community Relations Manager, presented AB 378 to the Committee. Mr. Crabbe stated that the bill would extend the California Air Resources Board's (CARB) cap-and-trade authority to 2030, prohibits a facility from increasing its annual greenhouse gas (GHG) emissions compared to its 2014-2016 average, authorizes CARB to adopt "no-trade zones" or facility-specific declining GHG limits, and requires CARB to adopt air pollutant emissions standards that industrial facilities must meet to receive free allowances after 2020.

Mr. Crabbe stated that generally this bill is in line with the SCAQMD's policy priorities regarding reducing GHG, criteria pollutant and toxic emissions within the South Coast region. However, staff has concerns about the bill as recently amended. There is costly duplication of effort created by the bill, between CARB and local air districts in terms of regulating local criteria pollutant and toxic emissions pollution sources. Expertise for regulating these types of local stationery sources of pollution resides with the local air districts. Staff has concerns that this bill too closely intertwines the cap-and-trade system with criteria pollutant and toxic emissions regulation.

Mr. Crabbe also informed the Committee, that as previously authorized by the Board, staff would also seek to add provisions to this cap and trade reauthorization bill that require at least 20% of total allocated annual Greenhouse Gas Reduction Fund (GGRF) monies be distributed in severe or extreme nonattainment areas for ozone. This allocation is to be used in a way that maximizes criteria and toxics emission reduction co-benefits, including to support the development and deployment of near-zero and zero-emission heavy-duty vehicles, off-road equipment, and federal sources.

In response to an inquiry from Councilmember Mitchell, Mr. Crabbe reported that there are at least three active cap-and-trade reauthorization bills currently in the Legislature, and the Governor may sponsor a bill at some time this year as well. It is expected that there will be a negotiation at some point during the legislative year to work out the cap-and-trade reauthorization issue.

In response to an inquiry from Mayor Pro Tem McCallon, Dr. Matt Miyasato, Deputy Executive Officer of the Science & Technology Advancement Office, clarified that fuel cell technology is more efficient at reducing CO2 emissions. A brief discussion ensued regarding fuel cell technology and greenhouse gas emissions.

Mr. Wayne Nastri, Executive Officer, stated that the bill is fairly complicated and could potentially cause confusion in terms of the roles of the local air districts and CARB with respect to what pollutants are regulated and how they are regulated.

Dr. Parker commented that it is better to meet and work with the author to get changes that align with SCAQMD goals and policy priorities.

***Staff recommended a position of WORK WITH AUTHOR on this bill.***

Moved by Rutherford; seconded by McCallon; unanimously approved.

Ayes: McCallon, Parker, Rutherford, Mitchell

Noes: None

Absent: Buscaino, Nelson

**AB 890 (Medina) Local Land Use Initiatives: Environmental Review**

Mr. Crabbe presented AB 890 to the Committee. Mr. Crabbe reported that AB 890 was just recently amended, but that staff has reviewed the bill and feels that the changes are still consistent with the prior intent of the bill.

Mr. Crabbe stated that AB 890 would require the city attorney or county counsel, within 15 days after a proposed initiative measure is filed, to determine whether the measure constitutes a project proposing specific activity that would eliminate discretionary land use approval for future development. If the city attorney or county counsel makes the determination that the measure constitutes such a project, the bill would require the city or county to comply with the requirements of CEQA. Within 5 days of completing the CEQA process, the bill would require the election officials to furnish to the proponents of the proposed measure an environmental summary of the measure. The bill would establish that the provision of the environmental summary to the proponent of the proposed measure constitutes approval of the project for purposes of CEQA. The bill would then require the governing body to submit the proposed ordinance, without alteration, to the voters at a special election.

In response to an inquiry from Dr. Parker, Ms. Barbara Baird, Chief Deputy Counsel, stated that the bill does not adversely affect SCAQMD's ability to review CEQA documents and that it furthers SCAQMD's ability to implement CEQA.

Supervisor Rutherford stated that San Bernardino County and the California State Association of Counties (CSAC) have a strong position against changes to land use authority locally. A discussion regarding the potential impacts of this bill on local land use authority ensued. Dr. Parker inquired as to whether this bill would take away any local authority in terms of how CEQA is implemented. Ms. Baird explained that local government land use projects are generally subject to CEQA analysis; however, in recent years, some project proponents have utilized the local initiative process to obtain project approval in a way that circumvents CEQA review. Ms. Baird explained that this bill would require proposed initiatives to be reviewed to determine if they involve projects that require CEQA review, and if so, then a CEQA review would be implemented. Ms. Baird indicated that this bill could theoretically be a double-edged sword for a local authority. The bill would increase a local authority's ability to have the appropriate projects be subject to CEQA review. However, the bill would also take away a local authority's ability to circumvent CEQA review for a project, if it so desired.

***Staff recommended a position of SUPPORT; the Committee approved a position of WATCH.***

Moved by Rutherford; seconded by Mitchell, recommended for approval by the following vote:

Ayes: McCallon, Parker, Rutherford, Mitchell

Noes: Nelson

Absent: Buscaino

**AB 1073 (E. Garcia) California Clean Truck, Bus, and Off-Road Vehicle and Equipment Technology Program**

Ms. Monika Kim, Legislative Assistant, presented AB 1073 to the Committee. Ms. Kim reported that this bill would extend the statutory sunset of January 1, 2018 to January 1, 2023 requiring CARB to allocate no less than 20 percent of available funding of the California Clean Truck, Bus, and Off-Road Vehicle and Equipment Technology Program to support the early commercial deployment of existing zero and near-zero-emission heavy-duty truck technology. Councilmember Mitchell voiced support for this bill because it would help the many small trucking fleets that do not have resources to fully fund a transition to cleaner technologies, yet there is a real need for this changeover due to the serious mobile emissions pollution problem.

***Staff recommended a position of SUPPORT***

Moved by Mitchell; seconded by Nelson; unanimously approved.

Ayes: McCallon, Parker, Rutherford, Nelson, Mitchell

Noes: None

Absent: Buscaino

**AB 1647 (Muratsuchi) Petroleum Refineries: Air Monitoring Systems**

Mr. Marc Carrel, Program Supervisor, presented AB 1647 to the Committee. Mr. Carrel reported that this bill would require an air district to require a petroleum refinery owner or operator to install the following monitoring systems, and operate and maintain them in accordance with the district-approved regional air monitoring plan, which would include: a community air monitoring system, installed on or before January 1, 2020, including equipment capable of measuring compounds resulting from refinery processes that are likely to impact communities; a fence-line monitoring system, installed on or before January 1, 2019, as required by district guidance taking into account technological capabilities and incorporating input from affected parties. Additionally, AB 1647 would require a petroleum refinery owner or operator to collect real-time data, maintain records, and make data available to the public in an accessible format.

Mr. Natri voiced concerns that this bill, as a state-wide approach to refineries, could impede the work SCAQMD, as well as other local air districts in the state, have committed toward the refinery issue. A discussion regarding SCAQMD's local rulemaking authority for refinery rules ensued. Dr. Parker emphasized the benefits of local rulemaking on the refinery issue and stated that working with the author of this bill would be wise to ensure consistency with SCAQMD needs.

***Staff recommended a position of WORK WITH AUTHOR on this bill.***

Moved by Mitchell; seconded by Parker; unanimously approved.

Ayes: McCallon, Nelson, Parker, Rutherford, Mitchell

Noes: None

Absent: Buscaino

**Report from SCAQMD Home Rule Advisory Group [Attachment 5]**

Please refer to Attachment 5 for the written report.

**Other Business:**

Ms. Baird reported that AB 302 (Gipson), relating to public fleet rules, which was supported with amendment by SCAQMD, was withdrawn from its recent policy committee hearing, and will now become a two-year bill. A brief discussion occurred regarding details related to the upcoming trip by SCAQMD Board members and staff to Washington, D.C.

**Public Comment Period:**

There were no public comments.

The committee adjourned until Friday, June 9, 2017.

**Attachments**

1. Attendance Record
2. Update on Federal Legislative Issues – Written Reports
3. Update on State Legislative Issues – Written Reports
4. Recommended Position on State Bills
5. SCAQMD Home Rule Advisory Group Report – Written Report



# **ATTACHMENT 1**

## **ATTENDANCE RECORD –May 12, 2017**

Councilmember Judith Mitchell.....SCAQMD Board Member  
Supervisor Janice Rutherford .....SCAQMD Board Member  
Mayor Pro-Tem McCallon (Videoconference).....SCAQMD Board Member  
Supervisor Shawn Nelson (Videoconference) .....SCAQMD Board Member  
Dr. Clark E. Parker, Sr. (Videoconference) .....SCAQMD Board Member

David Czamanske .....SCAQMD Board Consultant (Cacciotti)  
Mark Taylor .....SCAQMD Board Consultant (Rutherford)

Gary Hoitsma (teleconference) .....The Carmen Group  
Dal Harper (teleconference).....The Carmen Group  
Amelia Jenkins (teleconference).....Cassidy & Associates  
Ryan Mulvenon (teleconference).....Cassidy & Associates  
Mark Kadesh (teleconference).....Kadesh & Associates  
Chris Kierig (teleconference).....Kadesh & Associates  
Dave Ramey (teleconference).....Kadesh & Associates  
Paul Gonsalves (teleconference).....Joe A. Gonsalves & Son  
Will Gonzalez (teleconference) .....Gonzalez, Quintana, Hunter & Cruz  
Jacob Moss (teleconference).....Gonzalez, Quintana, Hunter & Cruz

Bill LaMarr .....California Small Business Alliance  
Rita Loof .....RadTech  
David Rothbart.....Los Angeles County Sanitation Districts  
Susan Stark.....Tesoro

Derrick Alatorre .....SCAQMD Staff  
Daniela Arellano .....SCAQMD Staff  
Debra Ashby .....SCAQMD Staff  
Barbara Baird.....SCAQMD Staff  
Naveen Berry .....SCAQMD Staff  
Marc Carrel .....SCAQMD Staff  
Tina Cox .....SCAQMD Staff  
Philip Crabbe .....SCAQMD Staff  
Monika Kim.....SCAQMD Staff  
Matt Miyasato .....SCAQMD Staff  
Wayne Natri .....SCAQMD Staff  
Robert Paud.....SCAQMD Staff  
Jeanette Short.....SCAQMD Staff  
Lisa Tanaka O'Malley .....SCAQMD Staff  
Laki Tisopulos .....SCAQMD Staff  
Todd Warden .....SCAQMD Staff  
Fabian Wesson.....SCAQMD Staff  
Kim White.....SCAQMD Staff  
Jill Whynot.....SCAQMD Staff  
William Wong.....SCAQMD Staff  
Rainbow Yeung .....SCAQMD Staff

## **ATTACHMENT 2**

### **MEMORANDUM**

**To:** South Coast AQMD Legislative Committee

**From:** Carmen Group

**Date:** May 2017

**Re:** Federal Update -- Executive Branch

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**EPA Announces Opportunity for DERA Grants:** On April 19, the EPA announced the availability of \$11 million in competitive grant funding through the Diesel Emissions Reductions Act (DERA) program for projects that reduce diesel emissions, particularly from fleets operating in areas designated as poor air quality areas. Eligible applicants include regional, state, local or tribal agencies and port authorities with jurisdiction over transportation or air quality. The application deadline is June 20, 2017.

**DOT Announces Opportunity for “Low-No” Bus Grants:** On April 27, the Department of Transportation announced the availability of up to \$55 million in competitive grant funds through the Federal Transit Administration’s Low or No Emission (Low-No) Bus Program. The program supports projects sponsored by local transit agencies to bring advanced bus vehicle technologies such as battery electric power and hydrogen fuel cells into service nationwide. Eligible grant recipients would include transit agencies, state transportation departments, and Native American tribes. The application deadline is June 26, 2017. Project selections will be announced no later than September 30, 2017.

**DOE Announces New National Lab Collaborations with Small Businesses:** On April 21, the Department of Energy announced that 38 small businesses had been selected to collaborate with national lab researchers through the Small Business Vouchers (SBV) pilot, bringing the total of such collaborations to 114. SBV facilitates access to the eight DOE national labs for American small businesses, enabling them to tap into the intellectual and technical resources they need to overcome technology challenges for their advanced energy projects. Projects of interest funded in this latest round include the following:

- ✓ Performance and design of low-pressure hydrogen storage systems to power mobile applications of hydrogen fuel cells.
- ✓ Testing a lightweight plug-in hybrid electric vehicle powertrain that will help get the first heavy-duty Class 6 vehicle to the commercial market.
- ✓ Developing technology which will dramatically increase the specific energy of lithium-ion batteries.

**EPA to Reconsider Oil and Gas Rule:** On April 19, the EPA announced the agency's intent to grant a reconsideration of the Final Rule, "Oil and Gas Sector: Emission Standards for New, Reconstructed and Modified Sources," published June 3, 2016. EPA Administrator Scott Pruitt said, "American businesses should have the opportunity to review new requirements, assess economic impacts and report back, before new requirements are finalized."

**Cabinet Appointments Update:** On April 24, the Senate confirmed **Sonny Perdue** as Agriculture Secretary by a vote of 87-11 and **Alex Acosta** as Labor Secretary by a vote of 60-38. As of May 4, only one Trump Cabinet nominee remained unconfirmed: US Trade Representative nominee **Robert Lighthizer**. Meanwhile, no appointment has yet been made for chairman of the Council on Environmental Quality.

**Sub-Cabinet Appointments of Note:** The following are among recent Trump Administration sub-cabinet appointments of special interest:

- **Dan Brouillette to be Deputy Secretary of Energy:** Brouillette spent the last 11 years as senior vice president at the financial institution USAA. He previously served as a vice president at Ford Motor Co, as chief of staff at the House Energy and Commerce committee, and as DOE assistant secretary for congressional affairs in the George W. Bush administration.
- **Daniel Simmons to be DOE Assistant Secretary for Energy Efficiency and Renewable Energy (EERE):** Simmons previously served as vice president for policy at the Institute for Energy Research, a conservative think tank. He also served with the American Legislative Exchange Council, the Mercatus Center, and as professional staff with the House Committee on Resources.
- **Alex Herrgott to be Associate Director for Infrastructure at the White House Council for Environmental Quality:** Herrgott previously served as professional staff with Sen. James Inhofe (R-OK) and as deputy staff director at the Senate Environment & Public Works Committee.

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**To:** South Coast Air Quality Management District

**From:** Cassidy & Associates

**Date:** May 3, 2017

**Re:** Federal Update – House of Representatives

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### **Issues of Interest to SCAQMD**

The House continues to work on their agenda and process legislation. April was a relatively quiet month as the entire Congress recessed for the two week April recess, which coincided with the Easter Holiday. As of today, May 3, the House has passed the \$1 trillion omnibus spending bill that will stave off a government shutdown and fund the government at new and updated levels through the end of the fiscal year.

### **Congress passes bill to repeal regional planning rule.**

The House voted 417-3 on the measure, S. 496, repealing the regional planning rule, which passed the Senate in early March with unanimous consent. The rule, finalized in December, would have required cities to more closely coordinate with neighbors in planning for roads and public transit by merging metropolitan planning organizations (MPOs) with those in areas that were expected to urbanize within 20 years. Administration originally justified the rule by saying it would make it easier for local planners to ease congestion and improve air quality. Mayors, planners, transit agencies and trade associations lambasted the rule as burdensome.

### **Congressional Staff Delegation Trip Update:**

Cassidy worked with the SCAQMD staff to finalize and execute the Congressional Staff Delegation trip which took place April 19 – 21. We had a great group of bipartisan Congressional staff join us for the trip. The following staff members attended:

- Tre Easton – Office of Senator Patty Murray, Assistant Democratic Leader (D-WA)
- Will Lovell – Office of Senator John Cornyn, Senate Majority Whip (R-TX)
- Kenneth DeGraff – Office of House Democratic Leader, Nancy Pelosi (D-CA)
- Ada Waelder – Senate Committee on Energy and Natural Resources
- Ashok Pinto – Senate Committee on Commerce, Science & Transportation

The trip was a success and has received very high marks and praise from each staff member who attended. This was an important trip to conduct to help SCAQMD broaden their visibility beyond the

California Senate delegation and Southern California House delegation. All of the offices represented are in leadership or key committee positions and by seeing the issues that are faced by South Coast in person, these staff members will be better positioned to help SCAQMD moving forward.

#### **Energy and Commerce Committee: Energy Subcommittee**

On May 3, the Energy and Commerce Committee's subcommittee on energy held a hearing on a range of hydropower legislation (pumped storage, small conduit, non-powered dams) as well as natural gas pipeline permitting. A major focus of the hearing was on the Federal Energy Regulatory Commission's approval of interstate natural gas pipelines (the house legislation imposes deadlines for FERC to make final permitting decisions) as well as adding generation capacity to existing non-powered dams and canals. We (Cassidy) expect this hearing to be a pre-cursor for the Committee to report out legislation on this topic for inclusion in one of two eventual packages 1) infrastructure package or 2) another attempt at comprehensive energy legislation that would be paired with action in the Senate.

#### **House Republicans to Probe Climate Research**

House Natural Resources Committee Chairman Rob Bishop and Oversight and Investigations Chairman Raul Labrador, have asked the Department of the Interior to provide data on its climate science centers. In the letter sent to Secretary Ryan Zinke, the Congressmen indicated that they plan to review the research centers tasked with studying climate change and that they are concerned with the effectiveness, management and levels of oversight of the program. We expect a hearing on this issue in June.

#### **EPA Withdraws Proposed Rules that Accompanied Clean Power Plan:**

The Environmental Protection Agency (EPA) withdrew two proposed rules that would have supplemented the Clean Power Plan final rule and provided support for the development of state plans: (i) a rule establishing federal plans and model rules for implementing the GHG emission guidelines for existing power plants, and (ii) a rule concerning details of the Clean Energy Incentive Program (CEIP).

#### **CEQ Withdraws Guidance on NEPA and Climate Change:**

The Council on Environmental Quality (CEQ) published a notice in the Federal Register announcing the withdrawal of its Final Guidance on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in NEPA Reviews.

# **KADESH & ASSOCIATES, LLC**

## **MEMORANDUM**

To: South Coast AQMD Legislative Committee  
From: Kadesh & Associates  
Date: May 3, 2017  
Re: Federal Legislative Update

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### **Omnibus Appropriations Bill**

April featured a two-week Easter/Passover/Spring recess for both the House and Senate. Most of the month was consumed with House and Senate Appropriations and Leadership staff working to complete the FY17 Appropriations bill. The Federal Government was operating under a Continuing Resolution through April 28, which was extended for one week.

With the successful completion of an Omnibus Appropriations bill for the remainder of FY17 (through September 30, 2017), the House and Senate are expected to pass the Omnibus before May 6, 2017.

EPA's overall FY17 budget suffered a 1% reduction in the House-Senate Omnibus package, far better than the 30% cut suggested by the Trump Administration for FY18 in its so-called "skinny budget" released in mid-March.

Funding for the Diesel Emissions Reduction Act (DERA) program will rise to \$60 million in FY17, an increase of \$10 million from the 2016 figure of \$50 million. The Targeted Airshed Grant Program, which received \$20 million last year, will receive \$30 million.

Note: These two programs rely upon Congressional support from both the House and Senate. In its final budget request released early last year, the Obama White House had planned to slash DERA to \$10 million. Targeted Airshed grants would have been zeroed out. For fiscal 2018, the Trump administration has also proposed to eliminate money for the Targeted Air Shed Grant Program.

In its "skinny" budget request released in March, the White House did not spell out its plan for DERA, but it had earlier triggered alarms with a suggestion that it considers the program obsolete.

Next steps:

- 1- President Trump is expected to sign the 1,700-page Omnibus bill once it reaches his desk.
- 2- The Administration could release its complete budget blueprint for Fiscal Year 2018 later this month, most likely the week of May 21.

3- Division G, Title II of the Omnibus directs: “Within 30 days of enactment of this Act, the Agency [EPA] is directed to submit to the House and Senate Committees on Appropriations its annual operating plan for fiscal year 2017, which shall detail how the Agency plans to allocate funds at the program project level.”

###

## **ATTACHMENT 3**



### **Joe A. Gonsalves & Son**

**Anthony D. Gonsalves**

**Jason A. Gonsalves**

**Paul A. Gonsalves**

PROFESSIONAL LEGISLATIVE REPRESENTATION

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**TO:** SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

**FROM:** ANTHONY, JASON, AND PAUL GONSALVES

**SUBJECT:** MAY LEGISLATIVE UPDATE

**DATE:** FRIDAY, MAY 12, 2017

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As the Legislature returned from Spring Break recess, policy committee hearings started to gear up to hear the 2,652 bills introduced this session. The April 28, 2017 and May 12, 2017 Legislative Deadlines to pass all bills out of their house of origin policy committees to their fiscal committees, has narrowed the field and, in some instances, even eliminated a number of bills. Our firm will continue to monitor and lobby all bills and amendments of interest to the District.

The following will provide you of issues of interest to the District:

- SB 1 & ACA 5 - Transportation Plan
- SB 100 (De Leon)
- Legislative Calendar
- Legislation



## **TRANSPORTATION PACKAGE**

After years of negotiations, the California Legislature adopted SB 1 (Beall), the Road Repair and Accountability Act of 2017 a \$5.2 billion transportation package that invests \$52.4 billion over the next 10 years with the revenues being split equally between state and local investments.

On March 29, 2017, Governor Brown and Legislative Leadership announced a \$5 billion-a-year transportation investment to fix our roads, freeways and bridges, with a deadline of April 6, 2017 to adopt the measure.

On April 6, 2017, the State Senate heard SB 1 on the floor. After lengthy debate, SB 1 passed out of the State Senate on a bare minimum 27-11 vote. The State Assembly then heard SB 1 later that evening, where they passed the bill out on a bare minimum 54-26 vote. SB 1 was signed into law by Governor Brown on April 28, 2017. In addition to SB 1, the Legislature passed and the Governor signed ACA 5, which includes the constitutional protections to protect the transportation funding.

The legislative package will cost most drivers less than \$10 a month and includes strict accountability provisions to ensure the funds can only be spent on transportation. The new funding will allow Caltrans to make major repairs to California's transportation infrastructure including 17,000 miles of pavement, 500 bridges and 55,000 culverts over the next ten years. The package will also fund huge investments in repairing local streets and roads. The package also provides historic levels of public transportation funding, or roughly double what was provided by Proposition 1B in 2006.

The following funds will be split equally between state and local investments over a ten-year horizon:

### **Fix Local Streets and Transportation Infrastructure (50%):**

- \$15 billion in "Fix-It-First" local road repairs, including fixing potholes
- \$7.5 billion to improve local public transportation
- \$2 billion to support local "self-help" communities that are making their own investments in transportation improvements
- \$1 billion to improve infrastructure that promotes walking and bicycling--double the existing funding levels
- \$825 million for the State Transportation Improvement Program local contribution
- \$250 million in local transportation planning grants.

### **Fix State Highways and Transportation Infrastructure (50%):**

- \$15 billion in "Fix-it-First" highway repairs, including smoother pavement
- \$4 billion in bridge and culvert repairs
- \$3 billion to improve trade corridors
- \$2.5 billion to reduce congestion on major commute corridors

- \$1.4 billion in other transportation investments, including \$275 million for highway and intercity-transit improvements.

Ensure Taxpayer Dollars Are Spent Properly with Strong Accountability Measures:

- Constitutional amendment, ACA 5 for voter approval on the June 2018 ballot, to prohibit spending the funds on anything but transportation
- Inspector General to ensure Caltrans and any entities receiving state transportation funds spend taxpayer dollars efficiently, effectively and in compliance with state and federal requirements
- Provision that empowers the California Transportation Commission to hold state and local government accountable for making the transportation improvements they commit to delivering
- Authorization for the California Transportation Commission to review and allocate Caltrans funding and staffing for highway maintenance to ensure those levels are reasonable and responsible
- Authorization for Caltrans to complete earlier mitigation of environmental impacts from construction, a policy that will reduce costs and delays while protecting natural resources.
- Includes provision that provides exemption language for in-use trucks

The transportation investment package is funded over a ten-years by everyone who uses our roads and highways, in the following ways:

- \$7.3 billion by increasing diesel excise tax 20 cents on November 1, 2017
- \$3.5 billion by increasing diesel sales tax to 5.75 percent on November 1, 2017
- \$24.4 billion by increasing gasoline excise tax 12 cents on November 1, 2017
- \$16.3 billion from an annual transportation improvement fee based on a vehicle's value starting January 1, 2018
- \$200 million from an annual \$100 Zero Emission Vehicle fee starting July 1, 2020
- \$706 million in General Fund loan repayments.

As part of the negotiations to garner the necessary 2/3 vote requirement in SB 1, the Legislature adopted and the Governor signed the following bills:

### **SB 100 (DE LEON)**

California already has the most ambitious climate targets in the world and the most aggressive renewable energy targets of any economy of its size. We lead the nation in renewable energy generation, clean tech venture capital investment, patent creation and clean car technology.

In 2015, The Legislature passed SB 350, The Clean Energy and Pollution Reduction Act (De Leon et al), which set a 50% clean energy standard by 2030. That bill also set new requirements for doubling energy efficiency and for wide scale transportation

electrification deployment. Senate Bill 32, the Global Warming Solutions Act of 2016 (Pavley), requires the state to reduce overall greenhouse gas emissions by 40% by 2030.

On Tuesday, May 2, 2017, California Senate President pro Tempore Kevin de León introduced Senate Bill 100, The California Clean Energy Act of 2017, which puts the state on the path to 100% clean, renewable energy by 2045.

SB 100 establishes an overall state target of 100% clean energy for California by 2045 by directing the CA Public Utilities Commission, CA Energy Commission, and Air Resources Board to adopt policies and requirements to achieve total reliance on renewable energy and zero carbon resources by that date.

Further, SB 100 proposes to accelerate SB 350's 50% mandate for clean renewable energy from 2030 to 2026 and establishes a new RPS benchmark of 60% by 2030 to ensure more clean energy in the California grid sooner. In addition, the bill would establish new policies for energy companies to capture uncontrolled methane emissions from dairies, landfills and waste water treatment plants and use these clean renewable fuels to replace natural gas.

Lastly, the bill would authorize investor owned utilities to invest in cleaner transportation fuels such as hydrogen or waste methane gas from dairies for heavy duty trucks to replace dirty diesel fuels, provided there are no other cleaner options such as zero emission vehicles available.

## **LEGISLATIVE CALENDAR**

The following will provide you with the upcoming Legislative deadlines for the 2017-18 legislative session:

April 28, 2017 – Last day for Policy Committees to Hear Fiscal Bills  
May 12, 2017 – Last Day for Policy Committees to Hear Non-Fiscal Bills  
May 19, 2017 – Last day for Policy Committees to Meet Prior to June 5, 2017  
May 26, 2017 – Last Day for Fiscal Committees to Meet.  
May 30-June 2, 2017 – Floor Session Only  
June 2, 2017 – Last Day to Pass Bills out of Their House of Origin.  
June 15, 2017 – Budget Bill Must be Adopted  
July 14, 2017 – Last day for Policy Committees to Hear Fiscal Bills  
July 21, 2017 – Last day for Policy Committees to Hear Bills.  
July 21-August 21, 2017 – Summer Recess  
September 1, 2017 – Last Day for Fiscal Committees to Hear Bills  
September 5-15, 2017 – Floor Session Only  
September 8, 2017 – Last Day to Amend on the Floor

September 15, 2017 – Last Day of Session

## **LEGISLATION**

### **AB 1082 (Burke)**

This bill would require an electrical corporation to file with the PUC, by July 30, 2018, a program proposal for the installation of vehicle charging stations at school facilities. The bill would require the PUC to review and approve, or modify and approve, the program proposal filed by the electrical corporation by December 31, 2018.

The bill would also authorize the use of these charging stations by faculty, students, and parents before, during, and after school hours at those times that the school facilities are operated for purposes of providing education or school-related activities. The bill would require the electrical corporation to install, own, operate, and maintain the charging equipment and would require that the approved program include a reasonable mechanism for cost recovery by the electrical corporation.

Lastly, the bill would require that schools receiving charging stations pursuant to the approved program participate in a time-variant rate approved by the commission.

This bill is double-referred was heard first in the Assembly Communications and Conveyance Committee on April 5, 2017 and passed on a 10-3 vote. The bill was heard next in the Assembly Education Committee on April 26, 2017 and passed on a 6-0 vote. The bill will be heard next in the Assembly Appropriations Committee.

### **AB 1083 (Burke)**

This bill proposes to require electrical corporations to file with, and the California Public Utilities Commission (CPUC) to approve, a program proposal for the installation of electric charging stations at state parks and beaches.

Specifically, the bill would require electrical corporations to file with the CPUC a program proposal for the installation of electrical grid integrated level-two charging stations at state parks and beaches, by September 30, 2018.

Additionally, the electrical corporations would be required to work in consultation with the CPUC, the California Energy Commission, and the California Air Resources Board (CARB), to develop a plan to create a robust charging network at all state parks and beaches within its service territory, by July 31, 2018 with the CPUC to review and approve, or modify and approve, the program by December 31, 2018.

The electrical corporations would be required to install, own, operate, and maintain the electric vehicle charging equipment. The approved program would include a mechanism for reasonable cost recovery by the electrical corporation.

This bill is double-referred was heard first in the Assembly Communications and Conveyance Committee on April 5, 2017 and passed on a 10-3 vote. The bill was then heard in the Assembly Education Committee on April 26, 2017 and passed on a 9-4 vote. The bill will be heard next in the Assembly Appropriations Committee.

#### AB 1646 (Muratsuchi)

This bill would require the risk management plan of a petroleum refinery to be posted on the Internet Web site of the Office of Emergency Services or on the Internet Web site of the UPA that has jurisdiction over the petroleum refinery.

In addition to existing requirements for the contents of a risk management plan, the bill would require the plan to provide for a system of automatic notification for residents who live within a 5-mile radius of the petroleum refinery, an audible alarm system that can be heard within a 10-mile radius of the petroleum refinery, and an emergency alert system for schools, public facilities, hospitals, and residential care homes located within a 10-mile radius of the petroleum refinery. The bill would require a petroleum refinery to implement those systems on or before January 1, 2019.

This bill was heard in the Assembly Environmental Safety and Toxic Materials Committee on April 25, 2017 and passed on a 4-0 vote. The bill will be heard next in the Assembly Appropriations Committee.

#### SB 57 (Stern)

This bill would change the law (SB 380) specific to the Aliso Canyon natural gas storage facility to require the third-party root cause analysis of the SS-25 well leak be completed and released to the public prior to the supervisor determining the facility is safe to re-start injections of natural gas. In addition, the bill would require the proceeding initiated by the CPUC to determine the feasibility of minimizing or eliminating the use of the Aliso Canyon natural gas facility be completed by December 31, 2017.

SB 57 is an urgency bill, which requires 2/3 vote. The bill was recently amended to add Senator Hertzberg as a principal co-author. In addition, the bill added Assemblymember Costa and Senator's Allen, Wilk and Weiner as co-author's.

The bill was heard in the Senate Energy, Utilities and Communications Committee on April 4, 2017 and passed on a 9-1 vote. The bill has been referred to the Senate Appropriations Committee.



SCAQMD Report  
Gonzalez, Quintana, Hunter & Cruz, LLC  
May 12, 2017

### **General Update**

For the second half of April, the Legislature and Governor's office have been recovering from the passage of SB 1, the Road Repair and Accountability Act of 2017. As of the beginning of May, however, focus has shifted toward the May Revision of the Budget, an extension of the cap & trade program that is currently set to expire in 2020, and President pro Tem De León's push for a 100% renewable Renewable Portfolio Standard (RPS).

Additionally, May 12th is the deadline for bills to pass out of policy committees. Policy committee hearings can resume on June 5<sup>th</sup>. Between now and then, only fiscal committees can hear bills.

### **Cap & Trade**

On May 1<sup>st</sup>, the Senate announced its cap and trade extension plan, SB 775 (Weickowski). This bill, along with the Assembly's cap and trade vehicle, AB 378 (C. Garcia, Holden, E. Garcia), is the second piece of what will ultimately become a three-way cap and trade negotiation between the two houses of the Legislature and the Governor.

This bill:

- Extends cap and trade in the form prescribed by this bill to 2030.
- Requires a 2/3 vote to avoid future legal challenges.
- Will return "climate dividends" to consumers. As drafted, dividends are to be approximately 90% of the revenue generated.
- Eliminates "free" allowances.
- Will establish a price ceiling for allowances of \$30 per ton and floor of \$10 per ton.
- Establishes the "Economic Competitiveness Assurance Program" that will protect CA manufacturers from out-of-state competition.
- Maintains currently capped sources.

### **Sponsored Legislation**

#### **AB 1132 (C. Garcia) Non-vehicular air pollution: order of abatement.**

Current law regulates the emission of air pollutants by stationary sources and authorizes the regional air quality management districts and air pollution control districts to enforce those requirements.

Current law authorizes the governing boards and the hearing boards of air districts to issue an order for abatement, after notice and a hearing, whenever they find a violation of those requirements.

This bill would authorize the air pollution control officer, if he or she determines that a person has violated those requirements and the violation presents an imminent and substantial endangerment to the public health or welfare, or the environment, to issue an order for abatement pending a hearing before the hearing board of the air district.

The bill is being opposed by a number of industry groups. We are in ongoing negotiations with them and are hopeful that a compromise can be reached.

The bill passed out of Assembly Natural Resources with a vote of 11-3 and is currently eligible to be taken up on the Assembly Floor.

#### **AB 1274 (O'Donnell) Carl Moyer Memorial Air Quality Standards Attainment Program. Smog Abatement Fee.**

This bill would, except as provided, exempt motor vehicles that are 8 or less model-years old from being inspected biennially upon renewal of registration. The bill would assess an annual smog abatement fee of \$24 on motor vehicles that are 7 or 8 model-years old. The bill would require the fee be deposited into the Air Pollution Control Fund and be available for expenditure, upon appropriation by the Legislature, to fund the Carl Moyer Memorial Air Quality Standards Attainment Program.

We are continuing to garner support for this legislation. We continue to have positive negotiations with a few groups concerned about aspects of the bill and are hopeful of coming to a resolution.

This bill requires a 2/3 vote for passage.

This bill passed out of Assembly Transportation Committee with a bipartisan vote of 11-2 and is currently on suspense in Assembly Appropriations.

**Assembly Bill 378 (C. Garcia)**

Greenhouse gases, criteria air pollutants, and toxic air contaminants.

**Summary:** This bill would extend the Air Resources Board's (ARB) cap-and-trade authority to 2030, prohibits a facility from increasing its annual greenhouse gas (GHG) emissions compared to the 2014-2016 average, authorizes ARB to adopt "no-trade zones" or facility-specific declining GHG limits, and requires ARB to adopt air pollutant emissions standards that industrial facilities must meet to receive free allowances after 2020.

**Background:** Existing law requires ARB to adopt a statewide GHG emissions limit equivalent to 1990 levels by 2020 and to adopt rules and regulations to achieve maximum technologically feasible and cost-effective GHG emission reductions. Existing law also requires ARB, in adopting rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions, to ensure that statewide GHG emissions are reduced to at least 40% below the 2020 statewide limit no later than December 31, 2030.

Current law requires ARB, when it adopts regulations to achieve GHG emission reductions beyond the 2020 statewide limit, to consider social costs and prioritize direct emission reductions at large stationary, mobile, and other sources.

Current law also authorizes ARB, in furtherance of achieving the 2020 statewide limit, to adopt a regulation that establishes a system of market-based declining annual aggregate emission limits for sources or categories of sources that emit greenhouse gas emissions, applicable from January 1, 2012 to December 31, 2020, to comply with GHG reduction regulations. ARB has adopted a cap-and-trade regulation which applies to large industrial facilities and electricity generators emitting more than 25,000 metric tons of CO<sub>2</sub> equivalent per year, as well as distributors of fuels, including gasoline, diesel, and natural gas.

**Status:** 4/25/2017 - From Committee on Natural Resources: Do pass and re-refer to Com. on APPR. (Ayes 7. Noes 3.) (April 24). Re-referred to Com. on APPR.

**Specific Provisions:** Specifically, AB 378 would:

- 1) Extend ARB's cap-and-trade authority to 2030;
- 2) Prohibit ARB from permitting a facility to increase its annual GHG emissions compared to the average of emissions reported from 2014 to 2016;
- 3) Authorize ARB to adopt "no-trade zones" or facility-specific declining GHG limits where facilities' emissions contribute to a cumulative pollution burden that creates a significant health impact;
- 4) Require ARB, in consultation with each affected air district, to adopt air pollutant emissions standards for industrial facilities subject to cap-and-trade;



- 5) Require ARB to evaluate the air pollutant emissions of each industrial facility, based on the following factors:
  - a) Permitted and actual emissions of criteria air pollutants and toxic air contaminants;
  - b) Date of the most recent new source review conducted pursuant to the federal Clean Air Act for each emission unit;
  - c) Emissions control measures for each criteria air pollutant and toxic air contaminant, including, but not limited to, emissions control technology for each emission unit;
  - d) Whether each emission unit meets "best available control technology" or "best available retrofit control technology," as applicable;
  - e) The performance of similar industrial facilities; and,
  - f) District records of complaints, enforcement actions, and penalties.
- 6) Prohibit ARB, after 2020, from allocating allowances pursuant to cap-and-trade to an industrial facility that does not meet the air pollutant emissions standards.

**Impacts on SCAQMD's Mission, Operations or Initiatives:** Generally, this bill is in line with the District's policy priorities regarding reducing GHG, criteria pollutant and toxic emissions within the South Coast region. However, the SCAQMD has concerns about the bill as recently amended. There is costly duplication of effort created by the bill, between ARB and local air districts in terms of regulating local criteria pollutant and toxic emissions pollution sources. Expertise for regulating these types of local stationary sources of pollution resides with the local air districts, plus ARB does not have the staff or resources to do such a duplicative effort. Although GHG and criteria pollutants emission reductions are often linked and money should be best spent to enhance co-benefits and reduce both simultaneously, there is also a concern that this bill too closely intertwines the cap and trade system with criteria pollutant and toxic emissions regulation.

**Additional Proposal:** GHG auction proceeds should be spent in areas of the state that are designated, based on the most recent standards, as severe or extreme nonattainment for ozone. Thus, require at least 20% of total allocated annual Greenhouse Gas Reduction Fund (GGRF) monies to be distributed in areas of the state that are designated, based on the most recent standards, as severe or extreme nonattainment for ozone. This allocation would be in addition to any other funding required by AB 1550 (25% in disadvantaged communities (DACs), 5% in low-income communities near DACs, and 5% in low-income communities anywhere in the state). This allocation of GGRF monies is to be used in a way that maximizes criteria and toxics emission reduction co-benefits, including to support the development and deployment of near-zero and zero-emission heavy-duty vehicles, off-road equipment, and federal sources (e.g. freight locomotives and ocean-going vessels), and to address air quality and public health impacts, along with simultaneous reductions in GHG emissions. A priority would be given to spending funding in DACs.

**Recommended Position: WORK WITH AUTHOR**

AMENDED IN ASSEMBLY APRIL 18, 2017

CALIFORNIA LEGISLATURE—2017–18 REGULAR SESSION

**ASSEMBLY BILL**

**No. 378**

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**Introduced by Assembly Members Cristina Garcia, Holden, and  
Eduardo Garcia  
(Coauthors: Assembly Members Bloom, Bonta, Eggman, Friedman,  
Gomez, Jones-Sawyer, Kalra, McCarty, Reyes, Mark Stone,  
Thurmond, and Ting)**

February 9, 2017

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An act to amend Section 38562.5 of, and to add ~~Section~~ *Sections* 38562.6 and 38567 to, the Health and Safety Code, relating to ~~greenhouse gases: air pollution.~~

LEGISLATIVE COUNSEL'S DIGEST

AB 378, as amended, Cristina Garcia. ~~California Global Warming Solutions Act of 2006: regulations. Greenhouse gases, criteria air pollutants, and toxic air contaminants.~~

The California Global Warming Solutions Act of 2006 designates the State Air Resources Board as the state agency charged with monitoring and regulating sources of emissions of greenhouse gases. The act authorizes the state board to include the use of market-based compliance mechanisms. The act requires the state board to approve a statewide greenhouse gas emissions limit equivalent to the statewide greenhouse gas emissions level in 1990 to be achieved by 2020 and to ensure that statewide greenhouse gas emissions are reduced to at least 40% below the 1990 level by 2030.

The act requires the state board, when adopting rules and regulations to achieve greenhouse gas emissions reductions beyond the statewide greenhouse gas emissions limit and to protect the state's most impacted

and disadvantaged communities, to follow specified requirements, consider the social costs of the emissions of greenhouse gases, and prioritize specified emission reduction rules and regulations.

This bill would additionally require the state board to consider and account for the social costs of the emissions and greenhouse gases when adopting those rules and regulations. The bill would authorize the state board to adopt or ~~subsequently revise new~~ *amend* regulations that establish a market-based compliance mechanism, applicable from January 1, 2021, to December 31, 2030, to complement direct emissions reduction measures in ensuring that statewide greenhouse gas emissions are reduced to at least 40% below the 1990 level by 2030. *The bill would prohibit the state board from permitting a facility to increase its annual emissions of greenhouse gases compared to the annual average of emissions of greenhouse gases reported during specified years. The bill would authorize the state board to adopt no-trade zones or facility-specific declining greenhouse gas emissions limits where facilities' emissions contribute to a cumulative pollution burden that creates a significant health impact.*

*This bill would require the state board, in consultation with affected air pollution control and air quality management districts, to adopt air pollutant emissions standards for emissions of criteria air pollutants and toxic air contaminants at industrial facilities that are subject to a market-based compliance mechanism. The bill would prohibit the state board from allocating allowances as part of a market-based compliance mechanism to industrial facilities that do not meet the air pollutant emissions standards for criteria air pollutants and toxic air contaminants.*

This bill would require the state board, in ensuring that statewide greenhouse gas emissions are reduced to at least 40% below the 1990 level by 2030, to adopt the most effective and equitable mix of emissions reduction measures and ensure that emissions reduction measures collectively and individually support achieving air quality and other environmental and public health goals.

Vote: majority. Appropriation: no. Fiscal committee: yes.  
State-mandated local program: no.

*The people of the State of California do enact as follows:*

1 SECTION 1. The Legislature finds and declares all of the  
2 following:

1 (a) It is a primary objective of the state to reduce greenhouse  
2 gas emissions, which is critical for the protection of all areas of  
3 the state but especially for the state's most disadvantaged  
4 communities, which will be disproportionately impacted by climate  
5 change and emissions from sources of greenhouse gases, including  
6 short-lived climate pollutants, as well as criteria pollutants and  
7 toxic air contaminants.

8 (b) While low-income communities and communities of color  
9 in the state suffer from some of the worst air quality in the nation,  
10 the state has been and must continue to be a leader in making  
11 investments in historically disadvantaged communities.

12 (c) Achieving the state's climate and air quality goals in an  
13 equitable and effective manner will require a mix of direct  
14 regulations and incentives that hold major emitters accountable  
15 for the social costs of their emissions, protect the state's economy,  
16 and direct investments to communities across the state.

17 SEC. 2. Section 38562.5 of the Health and Safety Code is  
18 amended to read:

19 38562.5. (a) When adopting rules and regulations pursuant to  
20 this division to achieve emissions reductions beyond the statewide  
21 greenhouse gas emissions limit and to protect the state's most  
22 impacted and disadvantaged communities, the state board shall  
23 follow the requirements in subdivision (b) of Section 38562,  
24 consider and account for the social costs of the emissions of  
25 greenhouse gases, and prioritize both of the following:

26 (1) Emission reduction rules and regulations that result in direct  
27 emission reductions at large stationary sources of greenhouse gas  
28 emissions and direct emission reductions from mobile sources.

29 (2) Emission reduction rules and regulations that result in direct  
30 emission reductions from sources other than those specified in  
31 paragraph (1).

32 ~~(b) The state board may adopt or subsequently revise new~~  
33 ~~regulations that establish a market-based compliance mechanism~~  
34 ~~developed pursuant to Part 5 (commencing with Section 38570),~~  
35 ~~applicable from January 1, 2021, to December 31, 2030, to~~  
36 ~~complement direct emissions reduction measures in ensuring the~~  
37 ~~reductions in greenhouse gas emissions required pursuant to~~  
38 ~~Section 38566. 38566, the state board may adopt or amend~~  
39 ~~regulations that establish a system of market-based declining~~  
40 ~~annual aggregate emissions limits for sources or categories of~~

1 sources that emit greenhouse gases, applicable from January 1,  
2 2021, to December 31, 2030, inclusive, that the state board  
3 determines will achieve the maximum technologically feasible and  
4 cost-effective reductions in the emissions of greenhouse gases, in  
5 the aggregate, from sources or categories of sources.

6 (c) The state board shall not permit a facility to increase its  
7 annual emissions of greenhouse gases compared to the annual  
8 average of emissions of greenhouse gases reported from 2014 to  
9 2016, inclusive.

10 (d) The state board may adopt no-trade zones or facility-specific  
11 declining greenhouse gas emissions limits where facilities'  
12 emissions contribute to a cumulative pollution burden that creates  
13 a significant health impact.

14 SEC. 3. Section 38562.6 is added to the Health and Safety  
15 Code, to read:

16 38562.6. (a) For purposes of this section, "district" has the  
17 same meaning as set forth in Section 39025.

18 (b) (1) On or before January 1, 2019, the state board, in  
19 consultation with each affected district, shall adopt air pollutant  
20 emissions standards applicable to industrial facilities subject to  
21 a regulation adopted pursuant to subdivision (b) of Section 38562.5  
22 or Part 5 (commencing with Section 38570).

23 (2) In adopting the air pollutant emissions standards pursuant  
24 to this subdivision, the state board shall evaluate the air pollutant  
25 emissions of each industrial facility subject to the regulation  
26 adopted pursuant to subdivision (c) of Section 38562. The state  
27 board's evaluation shall be based on the most recent available  
28 data on industrial facilities gathered from districts, facility  
29 operators, public comments, and other research as necessary, and  
30 shall examine all of the following:

31 (A) Permitted and actual emissions of criteria air pollutants  
32 and toxic air contaminants.

33 (B) Date of the most recent new source review conducted  
34 pursuant to the federal Clean Air Act (42 U.S.C. Sec. 7401, et seq.)  
35 for each emission unit.

36 (C) Emissions control measures for each criteria air pollutant  
37 and toxic air contaminant, including, but not limited to, emissions  
38 control technology for each emission unit.

1     (D) Whether each emission unit meets best available control  
2     technology, as defined in Section 40405, or best available retrofit  
3     control technology, as defined in Section 40406, as applicable.

4     (E) The performance of similar industrial facilities.

5     (F) District records of complaints, enforcement actions, and  
6     penalties.

7     (c) On and after January 1, 2021, the state board shall not  
8     allocate allowances pursuant to a regulation adopted pursuant to  
9     subdivision (b) of Section 38652.5 or Part 5 (commencing with  
10    Section 38570) to an industrial facility that does not meet the air  
11    pollutant emissions standards for criteria air pollutants and toxic  
12    air contaminants adopted pursuant to subdivision (b).

13    ~~SEC. 3.~~

14    SEC. 4. Section 38567 is added to the Health and Safety Code,  
15    to read:

16    38567. In furtherance of ensuring the reductions in greenhouse  
17    gas emissions required pursuant to Section 38566 and consistent  
18    with this division, the state board shall do all of the following:

19    (a) Adopt the most effective and equitable mix of emissions  
20    reduction measures to achieve the 2030 goal.

21    (b) Ensure that emissions reduction measures collectively and  
22    individually support achieving air quality and other environmental  
23    and public health goals.

## **AB 890 (Medina)**

### **Local land use initiatives: environmental review**

**Summary:** This bill would require projects proposed by local initiative to be reviewed pursuant to the California Environmental Quality Act (CEQA). Only projects that are exempt from CEQA, or eligible for a negative declaration because there is no substantial evidence that the project may have a significant effect on the environment, may be approved by local initiative.

**Background:** Existing law provides that initiative powers may be exercised by the electors of each city or county under procedures that the Legislature shall provide.

Existing law makes discretionary projects that are proposed to be carried out or approved by public agencies subject to CEQA, with certain exceptions. Requires the lead agency with the principal responsibility for carrying out or approving a proposed discretionary project, with respect to a project that is subject to CEQA, to determine whether the project may have a significant effect on the environment. Requires the lead agency to do the following, depending on the determination it makes regarding the project:

- a) Adopt a negative declaration, if it determines that there is no substantial evidence, in light of the record before the agency, that the project may have a significant effect on the environment;
- b) Adopt a mitigated negative declaration, if it determines that the project will have potentially significant effects to the environment, but revisions in the project plans or proposals made by, or agreed to by, the applicant would avoid the effects or mitigate the effects to a point where clearly no significant effect on the environment would occur, and there is no substantial evidence in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment; or,
- c) Prepare an EIR for the project, if it determines that there is substantial evidence, in light of the whole record before the lead agency, that the project may have a significant effect on the environment.

**Status:** 4/25/2017 - From committee: Do pass and re-refer to Com. on APPR. (Ayes 7. Noes 2.) (April 24). Re-referred to Com. on APPR.

**Specific Provisions** – Specifically, this bill would:

- Require the proponent of a proposed local initiative measure to request an environmental review of the measure to be conducted, as specified, at the time that the measure is submitted to the local elections official for the preparation of a ballot title and summary. Requires the elections official to immediately transmit a copy of

the measure to the planning department for the jurisdiction, which conducts the environmental review.

- Require the planning department of the local jurisdiction in which the measure is proposed to determine if the activity proposed by the measure is subject to CEQA within 30 days after the measure is filed. Requires the following actions to occur, depending on the result of the environmental review:
  - a) If the activity proposed by the measure is not subject to CEQA, the initiative measure may proceed;
  - b) If the activity proposed by the measure is subject to CEQA, and the planning department determines that there is no substantial evidence, in light of the whole record, that the activity proposed by the measure may have a significant effect on the environment, then the governmental body shall prepare a negative declaration within 180 days;
  - c) If the activity proposed by the measure is subject to CEQA, and the planning department determines that there is substantial evidence, in light of the whole record, that the activity proposed by the measure may have a significant effect on the environment, then the governmental body shall notify the proponents within 30 days after the measure is filed that the measure cannot be adopted by the initiative process, but can receive a public hearing if a sufficient number of signatures are collected.

**Impacts on SCAQMD's mission, operations or initiatives:** The author states that CEQA is California's signature environmental protection statute that helps identify and feasibly mitigate significant environmental impacts of land use developments. Unfortunately, the CEQA review process has been increasingly undermined by California's initiative process, a once highly regarded vital check on corporate influences over our government. Some developers are avoiding CEQA and other public review for proposed projects by qualifying a local measure for approval. Without a proper environmental review or mitigation plan, this results in significant, lasting negative impacts on communities.

The author states that this bill doesn't change the definition of a project subject to CEQA. The majority of projects subject to CEQA are approved via negative declaration. This bill seeks to strengthen local control with an understanding of cities tight budgets, their need for development, and desire not to see their air quality, public resources, and environment used in way that allows for only a certain set of developers to build and avoid environmental review and public scrutiny.

This bill could help protect public health within the South Coast region by reducing the number of developments that are detrimental to air quality, that seek and obtain CEQA exemptions.

**Recommended Position:** SUPPORT



**Support**

State Building and Construction Trades Council (Sponsor)  
Association of Environmental Professionals  
CalBike  
California Environmental Justice Alliance  
California Labor Federation  
California League of Conservation Voters  
Coalition for Clean Air  
Environmental California  
Environmental Protection Information Center  
National Parks Conservation Association  
Sierra Club California

**Opposition**

African American Farmers of California  
Associated Builders and Contractors of California  
California Association of Realtors  
California Building Industry Association  
California Business Properties Association  
California Chamber of Commerce  
California Citrus Mutual  
California Dairies, Inc.  
California Fresh Fruit Association  
California Independent Petroleum Association  
California State Association of Counties  
California Strawberry Commission  
California Taxpayers Association  
City of Indian Wells  
City of Riverside  
City of Thousand Oaks  
Far West Equipment Dealers Association  
Greater San Fernando Valley Chamber of Commerce  
League of California Cities  
Nisei Farmers League  
National Federation of Independent Business  
Rural County Representatives of California  
Santa Maria Valley Chamber of Commerce  
Southwest California Legislative Council  
West Coast Lumber & Building Material Association  
Western Electrical Contractors Association

AMENDED IN ASSEMBLY MAY 10, 2017

AMENDED IN ASSEMBLY APRIL 18, 2017

AMENDED IN ASSEMBLY MARCH 28, 2017

CALIFORNIA LEGISLATURE—2017–18 REGULAR SESSION

## **ASSEMBLY BILL**

**No. 890**

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**Introduced by Assembly Member Medina**

February 16, 2017

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An act to amend Sections 9105, 9108, 9110, 9116, 9118, 9203, 9207, 9208, 9214, 9215, 9301, 9305, 9310, ~~9311, and 9312~~ *and 9311* of, and to add Sections 9117, ~~9219, 9227, and 9318~~ *and 9227* to, the Elections Code, to amend Section 65867.5 of the Government Code, and to amend Sections 21065 and 21152 of the Public Resources Code, relating to initiatives.

### LEGISLATIVE COUNSEL'S DIGEST

AB 890, as amended, Medina. Local land use initiatives: environmental review.

The California Constitution authorizes the electors of each city and county to exercise the powers of initiative and referendum under procedures provided by the Legislature. Pursuant to that authority, existing law authorizes a proposed ordinance to be submitted to the appropriate elections official and requires the elections official to forward the proposed ordinance to appropriate counsel for preparation of a ballot title and summary. Existing law requires the elections official to provide the ballot title and summary to proponents of the proposed measure and the proponents are required to include the ballot title and summary upon each section of the petition used to gather the required number of signatures. Under existing law, if an initiative petition is

signed by not less than a specified number of voters and filed with the elections official, that elections official must submit the proposed ordinance to the county board of supervisors, legislative body of a city, or governing board of a district. Existing law requires the governing body to (1) adopt the ordinance without alteration, (2) call an election or special election in certain instances, at which the ordinance, without alteration, would be submitted to a vote of the voters of the jurisdiction, or (3) for cities and counties, order a report on the ordinance and then adopt the ordinance or submit it to the voters.

~~This bill would require a proponent of a proposed initiative ordinance, at the time he or she files a copy of the proposed initiative ordinance for preparation of a ballot title and summary with the appropriate elections official, to also request that an environmental review of the proposed initiative ordinance be conducted by the appropriate planning department, as specified. The bill would require the elections official to notify the proponent of the result of the environmental review. The bill would require the county board of supervisors, legislative body of a city, or governing board of a district, if the initiative ordinance proposes an activity that may have a significant effect on the environment, as specified, to order that an environmental impact report or mitigated negative declaration of the proposed ordinance be prepared. Once the environmental impact report or mitigated negative declaration has been prepared, the bill would require the governing body to hold a public hearing and either approve or deny the proposed ordinance, instead of allowing the proposed ordinance to be submitted to the voters.~~

*This bill would require the city attorney or county counsel to determine, within 15 days after a proposed initiative measure is filed, to determine whether the measure constitutes a project proposing specific activity that would eliminate discretionary land use approval for future development. If the city attorney or county counsel makes the determination that the measure constitutes such a project, the bill would require the city or county, to comply with the requirements of the California Environmental Quality Act ("CEQA"). Within 5 days of completing the CEQA process, the bill would require the elections official to furnish to the proponents of the proposed measure an environmental summary of the measure. The bill would establish that the provision of the environmental summary to the proponent of the proposed measure constitutes approval of the project for purposes of CEQA, except as specified. The bill would authorize the city or county to charge and collect a reasonable fee from the proponent in order to*

*recover the estimated costs to prepare an environmental document prepared in compliance with CEQA. Notwithstanding existing law, the bill would require the governing body to submit the proposed ordinance, without alteration, to the voters at a special election.*

By requiring local officials to provide a higher level of service, this bill would impose a state-mandated local program.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that, if the Commission on State Mandates determines that the bill contains costs mandated by the state, reimbursement for those costs shall be made pursuant to the statutory provisions noted above.

Vote: majority. Appropriation: no. Fiscal committee: yes.  
State-mandated local program: yes.

*The people of the State of California do enact as follows:*

1 SECTION 1. The Legislature finds and declares all of the  
2 following:

3 ~~(a) Local land use initiative measures are matters in which there~~  
4 ~~is a statewide interest because they have effects beyond the~~  
5 ~~jurisdictional limits of a local agency, and thus are not matters of~~  
6 ~~purely local concern.~~

7 ~~(b) Local land use initiative measures may affect the health,~~  
8 ~~safety, and general welfare of residents within and outside the~~  
9 ~~jurisdictional limits of a local agency.~~

10 ~~(c)~~

11 (a) Local land use initiative measures may impact the  
12 environment, which is an asset of all the people of California and  
13 is a matter of statewide concern, consistent with the legislative  
14 intent expressed in Chapter 1 (commencing with Section 21000)  
15 of Division 13 of the Public Resources Code.

16 ~~(d)~~

17 (b) A thorough environmental review of local land use projects  
18 is necessary to safeguard the environment and to inform the public  
19 of the projects' possible consequences. This environmental review  
20 must occur at the earliest possible time.

21 ~~(e)~~

1 (c) Voters, like legislators, should have access to information  
2 about a local land use initiative measure's environmental impacts.

3 ~~(f) Approving local land use initiative measures that have the~~  
4 ~~potential to cause significant environmental impacts is~~  
5 ~~fundamentally incompatible with California's substantive~~  
6 ~~environmental mandate, as set forth in Section 21002 of the Public~~  
7 ~~Resources Code, which states that projects are not to be approved~~  
8 ~~"if there are feasible alternatives or feasible mitigation measures~~  
9 ~~available which would substantially lessen the significant~~  
10 ~~environmental effects of such projects."~~

11 (d) *It is the intent of the Legislature to prevent a project*  
12 *applicant from avoiding enforceable environmental review by*  
13 *using the initiative process to remove the local government's*  
14 *discretionary authority over the project.*

15 ~~(g) Development~~

16 (e) *It is the intent of the Legislature to clarify that development*  
17 *agreements, which are negotiated contractual agreements between*  
18 *a legislative body and an individual or entity, are unsuitable for*  
19 *the initiative process.*

20 SEC. 2. Section 9105 of the Elections Code is amended to read:

21 9105. (a) The county elections official shall immediately  
22 transmit a copy of any proposed measure to the county counsel.  
23 Within 15 days after the proposed measure is filed, the county  
24 counsel shall provide and return to the county elections official a  
25 ballot title and summary for the proposed measure. The ballot title  
26 may differ from any other title of the proposed measure and shall  
27 express in 500 words or less the purpose of the proposed measure.  
28 In providing the ballot title, the county counsel shall give a true  
29 and impartial statement of the purpose of the proposed measure  
30 in such language that the ballot title shall neither be an argument,  
31 nor be likely to create prejudice, for or against the proposed  
32 measure.

33 (b) The county elections official shall furnish a copy of the  
34 ballot title and summary to the proponents of the proposed measure.  
35 The proponents shall, before the circulation of the petition, publish  
36 the Notice of Intention, and the ballot title and summary of the  
37 proposed measure in a newspaper of general circulation published  
38 in that county, and file proof of publication with the county  
39 elections official.

1 (c) The ballot title and summary prepared by the county counsel  
2 shall appear upon each section of the petition, above the text of  
3 the proposed measure and across the top of each page of the  
4 petition on which signatures are to appear, in roman boldface type  
5 not smaller than 12 point. The ballot title and summary shall be  
6 clearly separated from the text of the measure. The text of the  
7 measure shall be printed in type not smaller than 8 point.

8 The heading of the proposed measure shall be in substantially  
9 the following form:

10  
11 Initiative Measure to be Submitted Directly to the Voters  
12

13 The county counsel has prepared the following title and summary  
14 of the chief purpose and points of the proposed measure:

15 (Here set forth the title and summary prepared by the county  
16 counsel. This title and summary must also be printed across the  
17 top of each page of the petition whereon signatures are to appear.)

18 (d) (1) ~~Any proponent of a proposed measure shall file a copy~~  
19 ~~of the proposed measure with the elections official with a request~~  
20 ~~that an environmental review of the proposed measure be~~  
21 ~~conducted. The elections official shall immediately transmit a copy~~  
22 ~~of the proposed measure to the county planning department. Within~~  
23 ~~30 15 days after the proposed measure is filed, the county planning~~  
24 ~~department counsel shall determine if the activity proposed by the~~  
25 ~~measure is subject to the California Environmental Quality Act~~  
26 ~~(Division 13 (commencing with Section 21000) of the Public~~  
27 ~~Resources Code.) If the activity proposed by the measure is subject~~  
28 ~~to the California Environmental Quality Act and no exemption~~  
29 ~~applies, the county planning department shall determine if the~~  
30 ~~activity proposed by the measure may have a significant effect on~~  
31 ~~the environment, as defined by Section 21068 of the Public~~  
32 ~~Resources Code. If there is no substantial evidence, in light of the~~  
33 ~~whole record before the department, that the project may have a~~  
34 ~~significant effect on the environment, the county shall prepare a~~  
35 ~~negative declaration within 180 days. If there is substantial~~  
36 ~~evidence, in light of the whole record before the department, that~~  
37 ~~the project may have a significant effect on the environment, the~~  
38 ~~county shall notify the proponent, within 30 days after the proposed~~  
39 ~~measure is filed, that the proposed measure cannot be adopted by~~  
40 ~~the initiative process but can receive a public hearing pursuant to~~

1 ~~Section 9117 if a sufficient number of signatures are collected.~~  
2 *proposed measure constitutes a project pursuant to subdivision*  
3 *(d) of Section 21065 of the Public Resources Code. If the proposed*  
4 *measure constitutes a project pursuant to subdivision (d) of Section*  
5 *21065 of the Public Resources Code, the county shall comply with*  
6 *the requirements of the California Environmental Quality Act*  
7 *(Division 13 (commencing with Section 21000) of the Public*  
8 *Resources Code) which include preparing an environmental*  
9 *document, ensuring that any significant impacts are avoided or*  
10 *mitigated, if feasible, and making any required findings prior to*  
11 *providing the environmental summary. The county's provision of*  
12 *the environmental summary to the proponent for circulation shall*  
13 *constitute approval of the project for purposes of the California*  
14 *Environmental Quality Act, with the exception of Section 21152*  
15 *of the Public Resources Code. The county may charge and collect*  
16 *a reasonable fee from a proponent in order to recover the estimated*  
17 *cost to prepare an environmental document prepared in compliance*  
18 *with the California Environmental Quality Act, pursuant to Section*  
19 *21089 of the Public Resources Code.*

20 ~~(2) The elections official shall furnish a copy of the negative~~  
21 ~~declaration or any other environmental determination to the person~~  
22 ~~filing the proposed measure. Any negative declaration or any other~~  
23 ~~environmental determination shall be included with each section~~  
24 ~~of the petition.~~

25 *(2) If the proposed measure constitutes a project pursuant to*  
26 *subdivision (d) of Section 21065 of the Public Resources Code,*  
27 *within five days of completing the California Environmental*  
28 *Quality Act process, the elections official shall furnish to the*  
29 *proponents of the measure an environmental summary of the*  
30 *measure of less than 500 words, which shall provide an overview*  
31 *of any document prepared, any findings made, and where the*  
32 *document can be found.*

33 SEC. 3. Section 9108 of the Elections Code is amended to read:  
34 9108. The proponents may commence to circulate the petitions  
35 among the voters of the county for signatures by any registered  
36 voter of the county after publication of the title and summary  
37 prepared by the county counsel, and ~~after receiving a negative~~  
38 ~~declaration or other environmental determination from the county~~  
39 ~~planning department.~~ *if the proposed measure constitutes a project*  
40 *pursuant to subdivision (d) of Section 21065 of the Public*

1 *Resources Code, after receipt of the environmental summary.* Each  
2 section of the petition shall bear a copy of the notice of intention,  
3 and the title and summary prepared by the county counsel, and  
4 ~~any negative declaration or other environmental determination~~  
5 *environmental summary* prepared for the measure.

6 SEC. 4. Section 9110 of the Elections Code is amended to read:

7 9110. Signatures shall be secured and the petition shall be  
8 presented to the county elections official for filing within 180 days  
9 from the date of receipt of the title and ~~summary, and negative~~  
10 ~~declaration or other environmental determination, summary or~~  
11 *after receipt of the environmental summary, if applicable*, or after  
12 termination of any action for a writ of mandate pursuant to Section  
13 9106 and, if applicable, after receipt of an amended title or  
14 summary, or both, whichever occurs later.

15 SEC. 5. Section 9116 of the Elections Code is amended to read:

16 9116. If the initiative petition is signed by voters not less in  
17 number than 20 percent of the entire vote cast within the county  
18 for all candidates for Governor at the last gubernatorial election  
19 preceding the publication of the notice of intention to circulate an  
20 initiative petition, and contains a request that the ordinance be  
21 submitted immediately to a vote of the people at a special election,  
22 the board of supervisors shall ~~consider certifying the petition at~~  
23 ~~the next regular meeting after any required public review and~~  
24 ~~comment period. If the initiative petition proposes an activity for~~  
25 ~~which there is substantial evidence, in light of the whole record~~  
26 ~~before the county, that the activity may have a significant effect~~  
27 ~~on the environment, as defined by Section 21068 of the Public~~  
28 ~~Resources Code, the legislative body shall declare that the initiative~~  
29 ~~petition proposes an activity that is unsuitable for the initiative~~  
30 ~~process and proceed pursuant to Section 9117. If a negative~~  
31 ~~declaration was prepared for the petition, the negative declaration~~  
32 ~~shall be circulated for public review and comment for at least 20~~  
33 ~~days before the meeting at which the legislative body will consider~~  
34 ~~certifying the petition, and the legislative body shall consider any~~  
35 ~~public comments raised. At the meeting where the legislative body~~  
36 ~~will consider certifying the petition, the legislative body shall do~~  
37 one of the following:

38 (a) Adopt the ordinance without alteration, ~~unless a negative~~  
39 ~~declaration was prepared for the petition, in which case only~~  
40 ~~subdivision (b) applies.~~ *alteration at the regular meeting at which*



1 *the certification of the petition is presented or within 10 days after*  
2 *it is presented.*

3 (b) Immediately call a special election pursuant to subdivision  
4 (a) of Section 1405, at which the ordinance, without alteration,  
5 shall be submitted to a vote of the voters of the county.

6 (c) Order a report pursuant to Section 9111. When the report is  
7 presented to the board of supervisors, it shall either adopt the  
8 ordinance within 10 days or order an election pursuant to  
9 subdivision (b).

10 (d) *Notwithstanding subdivisions (a) and (c), if the proposed*  
11 *measure constitutes a project pursuant to subdivision (d) of Section*  
12 *21065 of the Public Resources Code, the board of supervisors*  
13 *shall submit the ordinance, without alteration, to the voters*  
14 *pursuant to subdivision (b). This subdivision shall not limit the*  
15 *board's discretion to order a report pursuant to Section 9111.*

16 ~~SEC. 6. Section 9117 is added to the Elections Code, to read:~~

17 ~~9117. If an initiative petition is signed by not less than the~~  
18 ~~number of voters specified in Section 9118, and there is substantial~~  
19 ~~evidence, in light of the whole record before the county, that the~~  
20 ~~activity proposed by the initiative petition may have a significant~~  
21 ~~effect on the environment, as defined by Section 21068 of the~~  
22 ~~Public Resources Code, or a reasonably foreseeable indirect~~  
23 ~~physical change in the environment, the legislative body shall~~  
24 ~~require that an environmental impact report or mitigated negative~~  
25 ~~declaration be prepared to analyze the impacts of the activity~~  
26 ~~proposed by the initiative petition. Once the environmental~~  
27 ~~document is complete, the legislative body shall hold a public~~  
28 ~~hearing to either approve or deny the proposal.~~

29 ~~SEC. 7.~~

30 ~~SEC. 6. Section 9118 of the Elections Code is amended to read:~~

31 ~~9118. If the initiative petition is signed by voters not less in~~  
32 ~~number than 10 percent of the entire vote cast in the county for all~~  
33 ~~candidates for Governor at the last gubernatorial election preceding~~  
34 ~~the publication of the notice of intention to circulate an initiative~~  
35 ~~petition, the board of supervisors shall consider certifying the~~  
36 ~~petition at the next regular meeting after any required public review~~  
37 ~~and comment period. If the initiative petition proposes an activity~~  
38 ~~for which there is substantial evidence, in light of the whole record~~  
39 ~~before the county, that the activity may have a significant effect~~  
40 ~~on the environment, as defined by Section 21068 of the Public~~

~~Resources Code, the legislative body shall declare that the initiative petition proposes an activity that is unsuitable for the initiative process and proceed pursuant to Section 9117. If a negative declaration was prepared for the petition, the negative declaration shall be circulated for public review and comment for at least 20 days before the meeting at which the legislative body will consider certifying the petition, and the legislative body shall consider any public comments raised. At the meeting where the legislative body will consider certifying the petition, the legislative body shall do one of the following:~~

~~(a) Adopt the ordinance without alteration, unless a negative declaration was prepared for the petition, in which case only subdivision (b) applies. alteration at the regular meeting at which the certification of the petition is presented or within 10 days after it is presented.~~

~~(b) Submit the ordinance, without alteration, to the voters pursuant to subdivision (b) of Section 1405, unless the ordinance petitioned for is required to be, or for some reason is, submitted to the voters at a special election pursuant to subdivision (a) of Section 1405.~~

~~(c) Order a report pursuant to Section 9111. When the report is presented to the board of supervisors, it shall either adopt the ordinance within 10 days or order an election pursuant to subdivision (b).~~

~~(d) Notwithstanding subdivision (a) and (c), if the proposed measure constitutes a project pursuant to subdivision (d) of Section 21065 of the Public Resources Code, the board of supervisors shall submit the ordinance, without alteration, to the voters pursuant to subdivision (b). This subdivision shall not limit the board's discretion to order a report pursuant to Section 9111.~~

~~SEC. 8.~~

~~SEC. 7.~~ Section 9203 of the Elections Code is amended to read:

~~9203. (a) Any proponent of a person who is interested in any proposed measure shall file a copy of the proposed measure with the elections official with a request that a ballot title and summary be prepared. This request shall be accompanied by the address of the person proposing the measure. The elections official shall immediately transmit a copy of the proposed measure to the city attorney. Within 15 days after the proposed measure is filed, the city attorney shall provide and return to the city elections official~~

1 a ballot title for and summary of the proposed measure. The ballot  
2 title may differ from any other title of the proposed measure and  
3 shall express in 500 words or less the purpose of the proposed  
4 measure. In providing the ballot title, the city attorney shall give  
5 a true and impartial statement of the purpose of the proposed  
6 measure in such language that the ballot title shall neither be an  
7 argument, nor be likely to create prejudice, for or against the  
8 proposed measure.

9 (b) The elections official shall furnish a copy of the ballot title  
10 and summary to the person filing the proposed measure. The person  
11 proposing the measure shall, before its circulation, place upon each  
12 section of the petition, above the text of the proposed measure and  
13 across the top of each page of the petition on which signatures are  
14 to appear, in roman boldface type not smaller than 12 point, the  
15 ballot title prepared by the city attorney. The text of the measure  
16 shall be printed in type not smaller than 8 point.

17 The heading of the proposed measure shall be in substantially  
18 the following form:

19  
20 Initiative Measure to be Submitted Directly to the Voters  
21

22 The city attorney has prepared the following title and summary  
23 of the chief purpose and points of the proposed measure:

24 (Here set forth the title and summary prepared by the city  
25 attorney. This title and summary must also be printed across the  
26 top of each page of the petition whereon signatures are to appear.)

27 ~~(c) (1) Any proponent of a proposed measure shall file a copy~~  
28 ~~of the proposed measure with the elections official with a request~~  
29 ~~that an environmental review of the proposed measure be~~  
30 ~~conducted. The elections official shall immediately transmit a copy~~  
31 ~~of the proposed measure to the city planning department. Within~~  
32 ~~30 15 days after the proposed measure is filed, the city planning~~  
33 ~~department attorney shall determine if the activity proposed by~~  
34 ~~the measure is subject to the California Environmental Quality~~  
35 ~~Act (Division 13 (commencing with Section 21000) of the Public~~  
36 ~~Resources Code.) If the activity proposed by the measure is subject~~  
37 ~~to the California Environmental Quality Act and no exemption~~  
38 ~~applies, the city planning department shall determine if the activity~~  
39 ~~proposed by the measure may have a significant effect on the~~  
40 ~~environment, as defined by Section 21068 of the Public Resources~~

1 ~~Code. If there is no substantial evidence, in light of the whole~~  
2 ~~record before the department, that the project may have a~~  
3 ~~significant effect on the environment, the city shall prepare a~~  
4 ~~negative declaration within 180 days. If there is substantial~~  
5 ~~evidence, in light of the whole record before the department, that~~  
6 ~~the project may have a significant effect on the environment, the~~  
7 ~~city shall notify the proponent, within 30 days after the proposed~~  
8 ~~measure is filed, that the proposed measure cannot be adopted by~~  
9 ~~the initiative process but can receive a public hearing pursuant to~~  
10 ~~Section 9219 if a sufficient number of signatures are collected.~~  
11 *proposed measure constitutes a project pursuant to subdivision*  
12 *(d) of Section 21065 of the Public Resources Code. If the proposed*  
13 *measure constitutes a project pursuant to subdivision (d) of Section*  
14 *21065 of the Public Resources Code, the city shall comply with*  
15 *the requirements of the California Environmental Quality Act*  
16 *(Division 13 (commencing with Section 21000) of the Public*  
17 *Resources Code) which include preparing an environmental*  
18 *document, ensuring that any significant impacts are avoided or*  
19 *mitigated, if feasible, and making any required findings prior to*  
20 *providing the environmental summary to the proponent. The city's*  
21 *provision of the environmental summary to the proponent for*  
22 *circulation shall constitute approval of the project for purposes*  
23 *of the California Environmental Quality Act, with the exception*  
24 *of Section 21152 of the Public Resources Code. The city may*  
25 *charge and collect a reasonable fee from a proponent in order to*  
26 *recover the estimated cost to prepare an environmental document*  
27 *prepared in compliance with the California Environmental Quality*  
28 *Act pursuant to Section 21089 of the Public Resources Code.*

29 ~~(2) The elections official shall furnish a copy of the negative~~  
30 ~~declaration or any other environmental determination to the person~~  
31 ~~filing the proposed measure. Any negative declaration or any other~~  
32 ~~environmental determination shall be included with each section~~  
33 ~~of the petition.~~

34 *(2) If the proposed measure constitutes a project pursuant to*  
35 *subdivision (d) of Section 21065 of the Public Resources Code,*  
36 *within five days of completing the California Environmental*  
37 *Quality Act process, the elections official shall furnish to the*  
38 *proponents of the proposed measure an environmental summary*  
39 *of the measure of less than 500 words, which must provide an*

1 *overview of any document prepared, any findings made, and where*  
2 *the document can be found.*

3 ~~SEC. 9.~~

4 *SEC. 8.* Section 9207 of the Elections Code is amended to read:

5 9207. The proponents may commence to circulate the petitions  
6 among the voters of the city for signatures by any registered voter  
7 of the city after publication or posting, or both, as required by  
8 Section 9205, of the title and summary prepared by the city  
9 attorney, and *if the proposed measure constitutes a project pursuant*  
10 *to subdivision (d) of Section 21065 of the Public Resources Code,*  
11 ~~after receiving a negative declaration or other environmental~~  
12 ~~determination from the city planning department. receipt of the~~  
13 *environmental summary.* Each section of the petition shall bear a  
14 copy of the notice of intention and the title and summary prepared  
15 by the city attorney, and any ~~negative declaration or other~~  
16 ~~environmental determination~~ *environmental summary* prepared  
17 for the measure.

18 ~~SEC. 10.~~

19 *SEC. 9.* Section 9208 of the Elections Code is amended to read:

20 9208. Signatures upon petitions and sections of petitions shall  
21 be secured, and the petition, together with all sections of the  
22 petition, shall be filed within 180 days from the date of receipt of  
23 the title and summary ~~and the negative declaration or other~~  
24 ~~environmental determination, or after receipt of the environmental~~  
25 *summary, if applicable,* or after termination of any action for a  
26 writ of mandate pursuant to Section 9204, and, if applicable, after  
27 receipt of an amended title or summary, or both, whichever occurs  
28 later. Petitions and sections of petitions shall be filed in the office  
29 of the elections official during normal office hours as posted. If  
30 the petitions are not filed within the time permitted by this section,  
31 the petitions shall be void for all purposes.

32 ~~SEC. 11.~~

33 *SEC. 10.* Section 9214 of the Elections Code is amended to  
34 read:

35 9214. If the initiative petition is signed by not less than 15  
36 percent of the voters of the city according to the last report of  
37 registration by the county elections official to the Secretary of  
38 State pursuant to Section 2187, effective at the time the notice  
39 specified in Section 9202 was published, or, in a city with 1,000  
40 or less registered voters, by 25 percent of the voters or 100 voters

of the city, whichever is the lesser number, and contains a request that the ordinance be submitted immediately to a vote of the people at a special election, the legislative body shall ~~consider certifying the petition at the next regular meeting after any required public review and comment period. If the initiative petition proposes an activity for which there is substantial evidence, in light of the whole record before the city, that the activity may have a significant effect on the environment, as defined by Section 21068 of the Public Resources Code, the legislative body shall declare that the initiative petition proposes an activity that is unsuitable for the initiative process and proceed pursuant to Section 9219. If a negative declaration was prepared for the petition, the negative declaration shall be circulated for public review and comment for at least 20 days before the meeting at which the legislative body will consider certifying the petition, and the legislative body shall consider any public comments raised. At the meeting where the legislative body will consider certifying the petition, the legislative body shall do one of the following:~~

(a) Adopt the ordinance, without alteration, ~~unless a negative declaration was prepared for the petition, in which case only subdivision (b) applies.~~ *at the regular meeting at which the certification of the petition is presented, or within 10 days after it is presented.*

(b) Immediately order a special election, to be held pursuant to subdivision (a) of Section 1405, at which the ordinance, without alteration, shall be submitted to a vote of the voters of the city.

(c) Order a report pursuant to Section 9212. When the report is presented to the legislative body, the legislative body shall either adopt the ordinance within 10 days or order an election pursuant to subdivision (b).

*(d) Notwithstanding subdivisions (a) and (c), if the proposed measure constitutes a project pursuant to subdivision (d) of Section 21065 of the Public Resources Code, the legislative body shall submit the ordinance, without alteration, to the voters pursuant to subdivision (b). This subdivision shall not limit the legislative body's discretion to order a report pursuant to Section 9212.*

~~SEC. 12.~~

*SEC. 11.* Section 9215 of the Elections Code is amended to read:

9215. If the initiative petition is signed by not less than 10 percent of the voters of the city, according to the last report of registration by the county elections official to the Secretary of State pursuant to Section 2187, effective at the time the notice specified in Section 9202 was published, or, in a city with 1,000 or less registered voters, by 25 percent of the voters or 100 voters of the city, whichever is the lesser number, the legislative body shall ~~consider certifying the petition at the next regular meeting after any required public review and comment period. If the initiative petition proposes an activity for which there is substantial evidence, in light of the whole record before the city, that the activity may have a significant effect on the environment, as defined by Section 21068 of the Public Resources Code, legislative body shall declare that the initiative petition proposes an activity that is unsuitable for the initiative process and proceed pursuant to Section 9219. If a negative declaration was prepared for the petition, the negative declaration shall be circulated for public review and comment for at least 20 days before the meeting at which the legislative body will consider certifying the petition, and the legislative body shall consider any public comments raised. At the meeting where the legislative body will consider certifying the petition, the legislative body shall do one of the following:~~

(a) Adopt the ordinance, without alteration, ~~unless a negative declaration was prepared for the petition, in which case only subdivision (b) applies. at the regular meeting at which the certification of the petition is presented or within 10 days after it is presented.~~

(b) Submit the ordinance, without alteration, to the voters pursuant to subdivision (b) of Section 1405, unless the ordinance petitioned for is required to be, or for some reason is, submitted to the voters at a special election pursuant to subdivision (a) of Section 1405.

(c) Order a report pursuant to Section 9212. When the report is presented to the legislative body, the legislative body shall either adopt the ordinance within 10 days or order an election pursuant to subdivision (b).

*(d) Notwithstanding subdivisions (a) and (c), if the proposed measure constitutes a project pursuant to subdivision (d) of Section 21065 of the Public Resources Code, the legislative body shall submit the ordinance, without alteration, to the voters pursuant*

1 *to subdivision (b). This subdivision shall not limit the legislative*  
2 *body's discretion to order a report pursuant to Section 9212.*

3 ~~SEC. 13. Section 9219 is added to the Elections Code, to read:~~

4 ~~9219. If an initiative petition is signed by not less than the~~  
5 ~~number of voters specified in Section 9215, and there is substantial~~  
6 ~~evidence, in light of the whole record before the city, that the~~  
7 ~~activity proposed by the initiative petition may have a significant~~  
8 ~~effect on the environment, as defined by Section 21068 of the~~  
9 ~~Public Resources Code, the legislative body shall require that an~~  
10 ~~environmental impact report or mitigated negative declaration be~~  
11 ~~prepared to analyze the impacts of the activity proposed by the~~  
12 ~~initiative petition. Once the environmental document is complete,~~  
13 ~~the legislative body shall hold a public hearing to either approve~~  
14 ~~or deny the proposal.~~

15 ~~SEC. 14.~~

16 ~~SEC. 12. Section 9227 is added to the Elections Code, to read:~~

17 ~~9227. The initiative process in a city charter shall not be written~~  
18 ~~or interpreted in a way that precludes environmental review of an~~  
19 ~~initiative under state law. if the proposed measure constitutes a~~  
20 ~~project pursuant to subdivision (d) of Section 21065 of the Public~~  
21 ~~Resources Code.~~

22 ~~SEC. 15.~~

23 ~~SEC. 13. Section 9301 of the Elections Code is amended to~~  
24 ~~read:~~

25 ~~9301. Any proposed ordinance may be submitted to the~~  
26 ~~governing board of the district by an initiative petition filed with~~  
27 ~~the district elections official. Signatures to these petitions shall be~~  
28 ~~obtained in the same manner as set forth in Section 9020. Affidavits~~  
29 ~~shall be attached to each petition section in the form and in the~~  
30 ~~manner set forth in Section 9022. An environmental review of the~~  
31 ~~activity proposed by the initiative petition shall be conducted in~~  
32 ~~the manner set forth in subdivision (c) of Section 9203.~~

33 ~~SEC. 16.~~

34 ~~SEC. 14. Section 9305 of the Elections Code is amended to~~  
35 ~~read:~~

36 ~~9305. After filing a copy of the notice of intention, statement~~  
37 ~~of the reasons for the proposed petition, written text of the~~  
38 ~~initiative, negative declaration or other environmental~~  
39 ~~determination, and affidavit of publication or posting with the~~  
40 ~~district elections official pursuant to Section 9304, and if the~~



1 *proposed measure constitutes a project pursuant to subdivision*  
2 *(d) of Section 21065 of the Public Resources Code, after receipt*  
3 *of the environmental summary, the petition may be circulated*  
4 *among the voters of the district for signatures by any person who*  
5 *meets the requirements of Section 102. Each section of the petition*  
6 *shall bear a copy of the notice of intention and statement; statement*  
7 *and a copy of the environmental summary, if applicable.*

8 ~~SEC. 17.~~

9 *SEC. 15.* Section 9310 of the Elections Code is amended to  
10 read:

11 9310. (a) If the initiative petition is signed by voters not less  
12 in number than 10 percent of the voters in the district, where the  
13 total number of registered voters is less than 500,000, or not less  
14 in number than 5 percent of the voters in the district, where the  
15 total number of registered voters is 500,000 or more, and the  
16 petition contains a request that the ordinance be submitted  
17 immediately to a vote of the people at a special election, the district  
18 board shall ~~consider certifying the petition at the next regular~~  
19 ~~meeting after any required public review and comment period. If~~  
20 ~~the initiative petition proposes an activity for which there is~~  
21 ~~substantial evidence, in light of the whole record before the district,~~  
22 ~~that the activity may have a significant effect on the environment,~~  
23 ~~as defined by Section 21068 of the Public Resources Code, the~~  
24 ~~district board shall declare that the initiative petition proposes an~~  
25 ~~activity that is unsuitable for the initiative process and proceed~~  
26 ~~pursuant to Section 9318. If a negative declaration was prepared~~  
27 ~~for the petition, the negative declaration shall be circulated for~~  
28 ~~public review and comment for at least 20 days before the meeting~~  
29 ~~at which the district board will consider certifying the petition,~~  
30 ~~and the district board shall consider any public comments raised.~~  
31 ~~At the meeting where the district board will consider certifying~~  
32 ~~the petition, the board shall do either of the following:~~

33 (1) Adopt the ordinance, without alteration, ~~unless a negative~~  
34 ~~declaration was prepared for the petition, in which case only~~  
35 ~~paragraph (2) applies; at the regular meeting at which the~~  
36 ~~certification of the petition is presented, or within 10 days after it~~  
37 ~~is presented.~~

38 (2) Immediately order that the ordinance be submitted to the  
39 voters, without alteration, pursuant to subdivision (a) of Section  
40 1405.

1 (b) The number of registered voters referred to in subdivision  
2 (a) shall be calculated as of the time of the last report of registration  
3 by the county elections official to the Secretary of State made  
4 before publication or posting of the notice of intention to circulate  
5 the initiative petition.

6 *(c) Notwithstanding subdivision (a), if the proposed measure*  
7 *constitutes a project pursuant to subdivision (d) of Section 21065*  
8 *of the Public Resources Code, the district board shall submit the*  
9 *ordinance, without alteration, to the voters pursuant to paragraph*  
10 *(2) of subdivision (a).*

11 ~~SEC. 18.~~

12 *SEC. 16.* Section 9311 of the Elections Code is amended to  
13 read:

14 9311. If the initiative petition does not request a special  
15 election, the district board shall ~~consider certifying the petition at~~  
16 ~~the next regular meeting after any required public review and~~  
17 ~~comment period. If the initiative petition proposes an activity for~~  
18 ~~which there is substantial evidence, in light of the whole record~~  
19 ~~before the district, that the activity may have a significant effect~~  
20 ~~on the environment, as defined by Section 21068 of the Public~~  
21 ~~Resources Code, the district board shall declare that the initiative~~  
22 ~~petition proposes an activity that is unsuitable for the initiative~~  
23 ~~process and proceed pursuant to Section 9318. If a negative~~  
24 ~~declaration was prepared for the petition, the negative declaration~~  
25 ~~shall be circulated for public review and comment for at least 20~~  
26 ~~days before the meeting at which the district board will consider~~  
27 ~~certifying the petition, and the district board shall consider any~~  
28 ~~public comments raised. At the meeting where the district board~~  
29 ~~will consider certifying the petition, the board shall do either of~~  
30 ~~the following:~~

31 (a) Adopt the ordinance, without alteration, ~~unless a negative~~  
32 ~~declaration was prepared for the petition, in which case only~~  
33 ~~subdivision (b) applies. at the regular meeting at which the~~  
34 ~~certification of the petition is presented, or within 10 days after it~~  
35 ~~is presented.~~

36 (b) Submit the ordinance to the voters, without alteration,  
37 pursuant to subdivision (b) of Section 1405, unless the ordinance  
38 petitioned for is required to be, or for some reason is, submitted  
39 to the voters at a special election pursuant to subdivision (a) of  
40 Section 1405.

1     (c) Notwithstanding subdivision (a), if the proposed measure  
2     constitutes a project pursuant to subdivision (d) of Section 21065  
3     of the Public Resources Code, the district board shall submit the  
4     ordinance, without alteration, to the voters pursuant to subdivision  
5     (b).

6     ~~SEC. 19. Section 9312 of the Elections Code is amended to~~  
7     ~~read:~~

8     ~~9312. Whenever an ordinance is required by this article to be~~  
9     ~~submitted to the voters of a district at an election, the district~~  
10    ~~elections official shall cause the ordinance to be printed. A copy~~  
11    ~~of the ordinance shall be made available to any voter upon request.~~

12    ~~The district elections official shall mail with the voter~~  
13    ~~information guide to each voter the following notice printed in no~~  
14    ~~less than 10-point type:~~

15    ~~“If you desire a copy of the proposed ordinance, please call the~~  
16    ~~district elections official’s office at (insert telephone number) and~~  
17    ~~a copy will be mailed at no cost to you.”~~

18    ~~If a negative declaration was prepared for the ordinance, the~~  
19    ~~district elections official shall print a copy of the negative~~  
20    ~~declaration and similarly notify the public that it is available by~~  
21    ~~request.~~

22    ~~SEC. 20. Section 9318 is added to the Elections Code, to read:~~

23    ~~9318. If an initiative petition is signed by not less than the~~  
24    ~~number of voters specified in Section 9310, and there is substantial~~  
25    ~~evidence, in light of the whole record before the district that the~~  
26    ~~activity proposed by the initiative petition may have a significant~~  
27    ~~effect on the environment, as defined by Section 21068 of the~~  
28    ~~Public Resources Code, or a reasonably foreseeable indirect~~  
29    ~~physical change in the environment, the district board shall require~~  
30    ~~that an environmental impact report or mitigated negative~~  
31    ~~declaration be prepared to analyze the impacts of the activity~~  
32    ~~proposed by the initiative petition. Once the environmental~~  
33    ~~document is complete, the district board shall hold a public hearing~~  
34    ~~to either approve or deny the proposal.~~

35    ~~SEC. 21.~~

36    ~~SEC. 17. Section 65867.5 of the Government Code is amended~~  
37    ~~to read:~~

38    ~~65867.5. (a) A development agreement is a legislative act that~~  
39    ~~shall be approved by ordinance and is subject to referendum.~~

1 (b) A development agreement cannot be approved by an  
2 ordinance adopted through the initiative process.

3 (c) A development agreement shall not be approved unless the  
4 legislative body finds that the agreement is consistent with the  
5 general plan and any applicable specific plan.

6 (d) A development agreement that includes a subdivision, as  
7 defined in Section 66473.7, shall not be approved unless the  
8 agreement provides that any tentative map prepared for the  
9 subdivision will comply with Section 66473.7.

10 ~~SEC. 22.~~

11 *SEC. 18.* Section 21065 of the Public Resources Code is  
12 amended to read:

13 21065. "Project" means an activity which may cause either a  
14 direct physical change in the environment, or a reasonably  
15 foreseeable indirect physical change in the environment, and which  
16 is any of the following:

17 (a) An activity directly undertaken by any public agency.

18 (b) An activity undertaken by a person which is supported, in  
19 whole or in part, through contracts, grants, subsidies, loans, or  
20 other forms of assistance from one or more public agencies.

21 (c) An activity that involves the issuance to a person of a lease,  
22 permit, license, certificate, or other entitlement for use by one or  
23 more public agencies.

24 (d) An activity ~~that is~~ proposed by a local initiative measure  
25 ~~that, if passed or adopted, would be implemented by a public~~  
26 ~~agency; that amends a public agency's zoning ordinance, general~~  
27 ~~plan, specific plan, or similar document or creates new ordinances,~~  
28 ~~regulations or planning documents, and that activity eliminates~~  
29 ~~discretionary land use approval for future development.~~

30 ~~SEC. 23.~~

31 *SEC. 19.* Section 21152 of the Public Resources Code is  
32 amended to read:

33 21152. (a) If a local agency approves or determines to carry  
34 out a project that is subject to this division, the local agency shall  
35 file notice of the approval or the determination within five working  
36 days after the approval or determination becomes final, with the  
37 county clerk of each county in which the project will be located.  
38 The notice shall identify the person or persons in subdivision (b)  
39 or (c) of Section 21065, as reflected in the agency's record of  
40 proceedings, and indicate the determination of the local agency

1 whether the project will, or will not, have a significant effect on  
2 the environment and shall indicate whether an environmental  
3 impact report has been prepared pursuant to this division. The  
4 notice shall also include certification that the final environmental  
5 impact report, if one was prepared, together with comments and  
6 responses, is available to the general public.

7 (b) If a local agency determines that a project is not subject to  
8 this division pursuant to subdivision (b) of Section 21080, and the  
9 local agency approves or determines to carry out the project, the  
10 local agency or the person specified in subdivision (b) or (c) of  
11 Section 21065 may file a notice of the determination with the  
12 county clerk of each county in which the project will be located.  
13 A notice filed pursuant to this subdivision shall identify the person  
14 or persons in subdivision (b) or (c) of Section 21065, as reflected  
15 in the agency's record of proceedings. A notice filed pursuant to  
16 this subdivision by a person specified in subdivision (b) or (c) of  
17 Section 21065 shall have a certificate of determination attached  
18 to it issued by the local agency responsible for making the  
19 determination that the project is not subject to this division pursuant  
20 to subdivision (b) of Section 21080. The certificate of  
21 determination may be in the form of a certified copy of an existing  
22 document or record of the local agency.

23 (c) A notice filed pursuant to this section shall be available for  
24 public inspection, and shall be posted within 24 hours of receipt  
25 in the office of the county clerk. A notice shall remain posted for  
26 a period of 30 days. Thereafter, the clerk shall return the notice to  
27 the local agency with a notation of the period it was posted. The  
28 local agency shall retain the notice for not less than 12 months.

29 (d) For a project submitted through the initiative process, a  
30 notice filed pursuant to this section shall not be filed until five  
31 working days after the ~~initiative petition is adopted or~~ election  
32 results approving the initiative are certified.

33 ~~SEC. 24.~~

34 *SEC. 20.* If the Commission on State Mandates determines that  
35 this act contains costs mandated by the state, reimbursement to  
36 local agencies and school districts for those costs shall be made  
37 pursuant to Part 7 (commencing with Section 17500) of Division  
38 4 of Title 2 of the Government Code.

O

### **Assembly Bill 1073 (E. Garcia)**

#### **California Clean Truck, Bus, and Off-Road Vehicle and Equipment Technology Program**

**Summary:** AB 1073 would extend the deadline from January 1, 2018 to January 1, 2023 requiring the California Air Resources Board (CARB) to allocate no less than 20% of available funding of the California Clean Truck, Bus, and Off-Road Vehicle and Equipment Technology Program to support the early commercial deployment or existing zero- and near-zero-emission heavy-duty truck technology

**Background:** The California Global Warming Solutions Act of 2006 designates ARB with monitoring and regulating sources of emissions of greenhouse gases, and to include the use of market-based compliance mechanisms. Existing law requires all moneys, except for fines and penalties, collected by CARB as part of a market-based compliance mechanism to be deposited in the Greenhouse Gas Reduction Fund.

The California Clean Truck, Bus, and Off-Road Vehicle and Equipment Technology Program, upon appropriation from the Greenhouse Gas Reduction Fund, funds zero- and near-zero-emission truck, bus, and off-road vehicle and equipment technologies and related projects, as specified. Existing law requires ARB, when funding a specified class of projects, to allocate, until January 1, 2018, no less than 20% of that available funding to support the early commercial deployment of existing zero- and near-zero-emission heavy-duty truck technology. The program allocates approximately \$20 million on an annual basis.

**Status:** 4/25/2017 - From committee: Do pass and re-refer to Com. on APPR. with recommendation: To Consent Calendar. (Ayes 10. Noes 0.) (April 24). Re-referred to Com. on APPR.

**Specific Provisions:** AB 1073 would require CARB, when funding a specified class of projects, to allocate, until January 1, 2023, no less than 20% of that available funding to support the early commercial deployment or existing zero- and near-zero-emission heavy-duty truck technology.

**Impacts on SCAQMD's Mission, Operations or Initiatives:** According to the author, trucking is vital to California's economy but is also the single largest source of pollution for the San Joaquin and South Coast Air Basins. This bill allows the trucking and bus industry to continue work uninterrupted yet become cleaner, offering the greatest opportunity to improve air quality.

AB 1073 is consistent with SCAQMD's efforts to reduce emissions from heavy-duty vehicles by supporting the early commercial deployment or existing zero- and near-zero-emission technology.

**Recommended Position: SUPPORT**

**ASSEMBLY BILL**

**No. 1073**

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**Introduced by Assembly Member Eduardo Garcia**

February 16, 2017

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An act to amend Section 39719.2 of the Health and Safety Code, relating to greenhouse gases.

LEGISLATIVE COUNSEL'S DIGEST

AB 1073, as introduced, Eduardo Garcia. California Clean Truck, Bus, and Off-Road Vehicle and Equipment Technology Program.

The California Global Warming Solutions Act of 2006 designates the State Air Resources Board as the state agency charged with monitoring and regulating sources of emissions of greenhouse gases. The act authorizes the state board to include the use of market-based compliance mechanisms. Existing law requires all moneys, except for fines and penalties, collected by the state board as part of a market-based compliance mechanism to be deposited in the Greenhouse Gas Reduction Fund and to be available upon appropriation by the Legislature.

The California Clean Truck, Bus, and Off-Road Vehicle and Equipment Technology Program, upon appropriation from the Greenhouse Gas Reduction Fund, funds zero- and near-zero-emission truck, bus, and off-road vehicle and equipment technologies and related projects, as specified. Existing law requires the state board, when funding a specified class of projects, to allocate, until January 1, 2018, no less than 20% of that available funding to support the early commercial deployment of existing zero- and near-zero-emission heavy-duty truck technology.

This bill instead would require the state board, when funding a specified class of projects, to allocate, until January 1, 2023, no less than 20% of that available funding to support the early commercial deployment or existing zero- and near-zero-emission heavy-duty truck technology .

Vote: majority. Appropriation: no. Fiscal committee: yes.

State-mandated local program: no.

*The people of the State of California do enact as follows:*

1 SECTION 1. Section 39719.2 of the Health and Safety Code  
2 is amended to read:

3 39719.2. (a) The California Clean Truck, Bus, and Off-Road  
4 Vehicle and Equipment Technology Program is hereby created,  
5 to be administered by the state board in conjunction with the State  
6 Energy Resources Conservation and Development Commission.  
7 The program, from moneys appropriated from the fund for *the*  
8 purposes of the program, shall fund development, demonstration,  
9 precommercial pilot, and early commercial deployment of zero-  
10 and ~~near-zero-emission~~ *near-zero-emission* truck, bus, and off-road  
11 vehicle and equipment technologies. Priority shall be given to  
12 projects benefiting disadvantaged communities pursuant to the  
13 requirements of Sections 39711 and 39713.

14 (b) Projects eligible for funding pursuant to this section include,  
15 but are not limited to, the following:

16 (1) Technology development, demonstration, precommercial  
17 pilots, and early commercial deployments of zero- and ~~near-zero~~  
18 ~~emission~~ *near-zero-emission* medium- and heavy-duty truck  
19 technology, including projects that help to facilitate clean  
20 goods-movement corridors. Until January 1, ~~2018~~, 2023, no less  
21 than 20 percent of funding made available for purposes of this  
22 paragraph shall support early commercial deployment of existing  
23 zero- and ~~near-zero-emission~~ *near-zero-emission* heavy-duty truck  
24 technology.

25 (2) Zero- and ~~near-zero-emission~~ *near-zero-emission* bus  
26 technology development, demonstration, precommercial pilots,  
27 and early commercial deployments, including pilots of multiple  
28 vehicles at one site or region.

29 (3) Zero- and ~~near-zero-emission~~ *near-zero-emission* off-road  
30 vehicle and equipment technology development, demonstration,



1 precommercial pilots, and early commercial deployments, including  
2 vehicles and equipment in the port, ~~agriculture~~, *agricultural*,  
3 marine, construction, and rail sectors.

4 (4) Purchase incentives, which may include point-of-sale, for  
5 commercially available zero- and ~~near-zero-emission~~  
6 *near-zero-emission* truck, bus, and off-road vehicle and equipment  
7 technologies and fueling infrastructure to support early market  
8 deployments of alternative technologies and to increase  
9 manufacturer volumes and accelerate market acceptance.

10 (5) Projects that support greater commercial motor vehicle and  
11 equipment freight efficiency and greenhouse gas emissions  
12 reductions, including, but not limited to, advanced intelligent  
13 transportation systems, autonomous vehicles, and other freight  
14 information and operations technologies.

15 (c) The state board, in consultation with the State Energy  
16 Resources Conservation and Development Commission, shall  
17 develop guidance through the existing Air Quality Improvement  
18 Program funding plan process for the implementation of this  
19 section that is consistent with the California Global Warming  
20 Solutions Act of 2006 (Division 25.5 (commencing with Section  
21 38500)) and this chapter.

22 (d) The guidance developed pursuant to subdivision (c) shall  
23 do all of the following:

24 (1) Outline performance criteria and metrics for deployment  
25 incentives. The goal shall be to design a simple and predictable  
26 structure that provides incentives for truck, bus, and off-road  
27 vehicle and equipment technologies that provide significant  
28 greenhouse gas reduction and air quality benefits.

29 (2) Ensure that program investments are coordinated with  
30 funding programs developed pursuant to the California Alternative  
31 and Renewable Fuel, Vehicle Technology, Clean Air, and Carbon  
32 Reduction Act of 2007 (Chapter 8.9 (commencing with Section  
33 44270) of Part 5).

34 (3) Promote projects that assist the state in reaching its climate  
35 goals beyond 2020, consistent with Sections 38550 and 38551.

36 (4) Promote investments in medium- and heavy-duty trucking,  
37 including, but not limited to, vocational trucks, short-haul and  
38 long-haul trucks, buses, and off-road vehicles and equipment,  
39 including, but not limited to, port equipment, agricultural  
40 equipment, marine equipment, and rail equipment.

1 (5) Implement purchase incentives for eligible technologies to  
2 increase *the* use of the cleanest vehicles in disadvantaged  
3 communities.

4 (6) Allow for remanufactured and retrofitted vehicles to qualify  
5 for purchase incentives if those vehicles meet warranty and  
6 emissions requirements, as determined by the state board.

7 (7) Establish a competitive process for the allocation of moneys  
8 for projects funded pursuant to this section.

9 (8) Leverage, to the maximum extent feasible, federal or private  
10 funding.

11 (9) Ensure that the results of emissions reductions or benefits  
12 can be measured or quantified.

13 (10) Ensure that activities undertaken pursuant to this section  
14 complement, and do not interfere with, efforts to achieve and  
15 maintain federal and state ambient air quality standards and to  
16 reduce toxic air contaminants.

17 (e) In evaluating potential projects to be funded pursuant to this  
18 section, the state board shall give priority to projects that  
19 demonstrate one or more of the following characteristics:

20 (1) Benefit to disadvantaged communities pursuant to Sections  
21 39711 and 39713.

22 (2) The ability to leverage additional public and private funding.

23 (3) The potential for cobenefits or multiple-benefit attributes.

24 (4) The potential for the project to be replicated.

25 (5) Regional benefit, with focus on collaboration between  
26 multiple entities.

27 (6) Support for technologies with broad market and emissions  
28 reduction potential.

29 (7) Support for projects addressing technology and market  
30 barriers not addressed by other programs.

31 (8) Support for enabling technologies that benefit multiple  
32 technology pathways.

33 (f) ~~To assist in~~ *In* the implementation of this section, the state  
34 board, in consultation with the State Energy Resources  
35 Conservation and Development Commission, shall create an annual  
36 framework and plan. The framework and plan shall be developed  
37 with public input and may utilize existing investment plan  
38 processes and workshops as well as existing state and third-party  
39 research and technology roadmaps. The framework and plan shall  
40 do all of the following:

1 (1) Articulate an overarching vision for technology development,  
2 demonstration, precommercial pilot, and early commercial  
3 deployments, with a focus on moving technologies through the  
4 commercialization process.

5 (2) Outline technology categories and performance criteria for  
6 technologies and applications that may be considered for funding  
7 pursuant to this section. This shall include technologies for  
8 medium- and heavy-duty trucking, including, but not limited to,  
9 vocational trucks, short-haul and long-haul trucks, buses, and  
10 off-road vehicles and equipment, including, but not limited to, port  
11 equipment, agricultural equipment, construction equipment, marine  
12 equipment, and rail equipment.

13 (3) Describe the roles of the relevant agencies and the process  
14 for coordination.

15 (g) For purposes of this section, “~~zero- and near-zero emission~~”  
16 *near-zero-emission*” means vehicles, fuels, and related technologies  
17 that reduce greenhouse gas emissions and improve air quality when  
18 compared with conventional or fully commercialized alternatives,  
19 as defined by the state board in consultation with the State Energy  
20 Resources Conservation and Development Commission. “~~Zero-~~  
21 ~~and near-zero emission~~” *near-zero-emission*” may include, but is  
22 not limited to, zero-emission technology, enabling technologies  
23 that provide a pathway to emissions reductions, advanced or  
24 alternative fuel engines for long-haul trucks, and hybrid or  
25 alternative fuel technologies for trucks and off-road equipment.

**AB 1647 (Muratsuchi)**  
**Petroleum refineries: air monitoring systems.**

**Summary:** This bill requires an air district to require a petroleum refinery owner or operator to install the following monitoring systems, and operate and maintain them in accordance with the district-approved regional air monitoring plan:

- 1) A community air monitoring system, installed on or before January 1, 2020, including equipment capable of measuring compounds resulting from refinery processes that are likely to impact communities; and
- 2) A fence-line monitoring system, installed on or before January 1, 2019, as required by district guidance taking into account technological capabilities and incorporating input from affected parties.

Additionally, this bill requires a petroleum refinery owner or operator to collect real-time data, maintain records, and make it available to the public in an accessible format.

**Background:** Existing law generally designates air pollution control and air quality management districts with the primary responsibility for the control of air pollution from all sources other than vehicular sources. Existing law authorizes the State Air Resources Board or the air district to require the owner or the operator of an air pollution emission source to take any action that the state board or the air district determines to be reasonable for the determination of the amount of air pollution emissions from that source.

**Status:** 4/18/2017 - Re-referred to Com. on NAT. RES. From committee: Do pass and re-refer to Com. on APPR. (Ayes 8. Noes 2.) (April 17). Re-referred to Com. on APPR.

**Specific Provisions** – Specifically, this bill would:

- Require an air district to require a petroleum refinery owner or operator to install the following monitoring systems, and operate and maintain them in accordance with the district-approved regional air monitoring plan:
  - 1) A community air monitoring system, installed on or before January 1, 2020, including equipment capable of measuring compounds resulting from refinery processes that are likely to impact communities; and
  - 2) A fence-line monitoring system, installed on or before January 1, 2019, as required by district guidance taking into account technological capabilities and incorporating input from affected parties.
- Require the owner or operator of a refinery to collect real-time data from these monitoring systems, to make that data available to the public at the time of collection in a publicly accessible format, and to maintain records of that data.
- “Community air monitoring system” means equipment that measures and records air pollutant concentrations in the ambient air at or near sensitive receptor locations near a

petroleum refinery and that may be useful for estimating associated pollutant exposures and health risks and in determining trends in air pollutant levels over time.

- “Fence-line monitoring system” means equipment that measures and records air pollutant concentrations along the property boundary of a petroleum refinery and that may be useful for detecting or estimating the quantity of fugitive emissions, gas leaks, and other air emissions from the refinery.

**Impacts on SCAQMD’s mission, operations or initiatives:** This bill is focused on addressing emissions from petroleum refineries that can have harmful impacts on the surrounding communities, including those within the South Coast region. Recent developments in technology have shown that emissions from such refineries may be exceeding that which is currently being reported by existing methods. Thus, this bill may help reduce harmful toxic emissions which disproportionately impact the areas neighboring those facilities. In particular, this bill could help protect public health within many disadvantaged communities throughout the South Coast.

However, SCAQMD rulemaking on the issue addressed by this bill is already underway and there are concerns in terms of making sure that the local public stakeholder process is preserved. Further, the bill’s terminology about operation and maintenance in accordance with a district-approved regional air monitoring plan seems ambiguous and needs clarification. SCAQMD would like to work with the author to address these and any other concerns that may come up during the legislative process for this bill.

**Recommended Position:** WORK WITH AUTHOR

AMENDED IN ASSEMBLY APRIL 17, 2017

CALIFORNIA LEGISLATURE—2017–18 REGULAR SESSION

**ASSEMBLY BILL**

**No. 1647**

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**Introduced by Assembly Member Muratsuchi**

February 17, 2017

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An act to add Section 42705.5 to the Health and Safety Code, relating to nonvehicular air pollution.

LEGISLATIVE COUNSEL'S DIGEST

AB 1647, as amended, Muratsuchi. Petroleum refineries: air monitoring systems.

Existing law generally designates air pollution control and air quality management districts with the primary responsibility for the control of air pollution from all sources other than vehicular sources. Existing law authorizes the State Air Resources Board or the air district to require the owner or the operator of an air pollution emission source to take any action that the state board or the air district determines to be reasonable for the determination of the amount of air pollution emissions from that source.

This bill would require an air district to require the owner or operator of a petroleum refinery to install a community air monitoring system, as defined, on or before January 1, 2020, *as specified*, and to install a fence-line monitoring system, as defined, on or before January 1, 2019. ~~By adding to the duties of air districts, this bill would impose a state-mandated local program. 2019, as specified.~~ The bill would require the owner or operator of a refinery to collect real-time data from these monitoring systems, to make that data available to the public at the time of collection in a publicly accessible format, and to maintain records

of that data. *By adding to the duties of air districts, this bill would impose a state-mandated local program.*

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority. Appropriation: no. Fiscal committee: yes.  
State-mandated local program: yes.

*The people of the State of California do enact as follows:*

1 SECTION 1. Section 42705.5 is added to the Health and Safety  
2 Code, to read:

3 42705.5. (a) For purposes of this section, the following  
4 definitions apply:

5 (1) "Community air monitoring system" means equipment that  
6 measures and records air pollutant concentrations in the ambient  
7 air at or near sensitive receptor locations near a petroleum refinery  
8 and that may be useful for estimating associated pollutant  
9 exposures and health risks and in determining trends in air pollutant  
10 levels over time.

11 (2) "Fence-line monitoring system" means equipment that  
12 measures and records air pollutant concentrations along the  
13 property boundary of a petroleum refinery and that may be useful  
14 for detecting or estimating the quantity of fugitive emissions, gas  
15 leaks, and other air emissions from the refinery.

16 (b) Notwithstanding Section 42708, a district shall require the  
17 owner or operator of a petroleum refinery to install the following  
18 monitoring systems, which shall be operated and maintained in  
19 accordance with the regional air monitoring plan approved by the  
20 district:

21 (1) A community air monitoring system, installed on or before  
22 January 1, ~~2020~~, *2020, based on the federal Environmental*  
23 *Protection Agency's monitoring siting requirements and guidance.*  
24 *The community air monitoring system shall include equipment*  
25 *capable of measuring compounds resulting from refinery processes*  
26 *that are likely to impact communities.*

27 (2) A fence-line monitoring system, installed on or before  
28 January 1, ~~2019~~, *2019, as required by guidance developed by the*

1 *appropriate district. The guidance developed by the district shall*  
2 *take into account technological capabilities and incorporate input*  
3 *from affected parties.*

4 (c) The owner or operator of a petroleum refinery shall collect  
5 real-time data from the community air monitoring system and the  
6 fence-line monitoring system and shall maintain records of that  
7 data. This data shall be available to the public at the time of  
8 collection in a publicly accessible format.

9 SEC. 2. No reimbursement is required by this act pursuant to  
10 Section 6 of Article XIII B of the California Constitution because  
11 a local agency or school district has the authority to levy service  
12 charges, fees, or assessments sufficient to pay for the program or  
13 level of service mandated by this act, within the meaning of Section  
14 17556 of the Government Code.



# ATTACHMENT 5



**South Coast  
Air Quality Management District**  
21865 Copley Drive, Diamond Bar, CA 91765-4182  
(909) 396-2000 • [www.aqmd.gov](http://www.aqmd.gov)

## **HOME RULE ADVISORY GROUP**

**Wednesday, March 15, 2017**

### **MEETING MINUTES**

#### **CHAIR:**

Dr. Joseph Lyou, Governing Board member

#### **MEMBERS PRESENT:**

Curt Coleman (Southern California Air Quality Alliance); Bill LaMarr (California Small Business Alliance); Art Montez (AMA International); Noel Muyco (Southern California Gas); Penny Newman (Center for Community Action and Environmental Justice); Terry Roberts (American Lung Association of California); David Rothbart (Los Angeles County Sanitation District); and TyRon Turner (Dakota Communications).

The following members participated by conference call: Chris Gallenstein (CARB); Rongsheng Luo (SCAG); Bill Quinn (California Council for Environmental & Economic Balance); and Larry Rubio (Riverside Transit Agency).

#### **MEMBERS ABSENT:**

Micah Ali (Compton Unified School District Board of Trustees); Mike Carroll (Regulatory Flexibility Group); Michael Downs (Downs Energy); Jaclyn Ferlita (Air Quality Consultants); Jayne Joy (Eastern Municipal Water District); Mark Olson (Gerdau Rancho Cucamonga Mill); Patty Senecal (Western States Petroleum Association); Larry Smith (Cal Portland Cement); Morgan Wyenn (Natural Resources Defense Council) and Amy Zimpfer (EPA)

#### **OTHER ATTENDEES:**

Mark Abramowitz (Board Consultant to Dr. Lyou); Frank Caponi (Los Angeles County Sanitation District) and Rita Loof (Radtech)

#### **AQMD STAFF:**

Wayne Nastri	Executive Officer
Philip Fine	Deputy Executive Officer
Susan Nakamura	Acting Deputy Executive Officer
William Wong	Principal Deputy District Counsel
Philip Crabbe	Community Relations Manager
Ann Scagliola	Administrative Secretary

#### **OPENING COMMENTS AND SELF-INTRODUCTIONS**

The meeting was called to order at 10:00 a.m. by Dr. Joseph Lyou (Chairman).

## **APPROVAL OF JANUARY 11, 2017 MEETING MINUTES**

Dr. Lyou asked for comments on the January 11, 2017 meeting minutes. Hearing none, the minutes were approved.

## **CARB REGULATORY ACTIVITIES**

Chris Gallenstein reported on the following items to be discussed at the March 2017 CARB Board Meeting and other important items.

- Consider approval of the 2016 Ozone State Implementation Plan for San Diego County.
- Consider approval of the 2016 Ozone and PM2.5 State Implementation Plan for the South Coast Air Quality Management District's Air Quality Management Plan and the Coachella Valley.
- Consider approval of the State Strategy for the State Implementation Plan.
- Hear proposed updates to SB 375 greenhouse gas emission reduction targets.
- Consider the approval of proposed regulations for greenhouse gas emissions standards for crude oil and natural gas facilities.
- Consider proposed final greenhouse gas emission standards for crude oil and natural gas facilities, natural gas processing plants, natural gas gathering, boosting, and transmission compressor stations, and underground natural gas storage facilities.
- Consider approval of the Short-Lived Climate Pollutant Reduction Strategy.
- Hear update on first Draft Volkswagen Zero Emission Vehicles Investment Plan.

## **Discussion**

Bill LaMarr inquired if CARB's Board can approve, disapprove and/or request changes to SCAQMD's SIP. Chris Gallenstein indicated that the CARB Board can approve, disapprove or request additional changes or review. SCAQMD staff further clarified that there is an established process to follow, if the SIP is not approved by the CARB Governing Board.

David Rothbart inquired if the staff report on CARB's review of the 2016 Air Quality Management Plan was corrected, specifically the language on the zero emission vehicles. Bill Quinn commented that he spoke with Scott King that morning and CARB will prepare an errata sheet to reflect the corrected language within their staff report.

## **LEGISLATIVE UPDATE**

Philip Crabbe provided a report on the February and March 2017 Legislative Committee meetings.

### **Federal Legislative Issues (February)**

Attorney General Jeff Sessions, Secretary of Health and Human Services Tom Price, and Secretary of Education Betsey DeVos were officially appointed to President Donald Trump's cabinet. President Trump's two-for-one executive order, which would require federal agencies to revoke two regulations for every rule passed, faced lawsuits from various groups. In addition, the fuel economy standards midterm review could potentially be rolled back through a funding limitation on the appropriations bills.

President Trump's 2018 fiscal budget process is expected to be completed by early June. The fiscal year 2018 appropriations bill will likely have a late congressional appropriations process and be condensed, as the federal fiscal year begins on October 1. The fiscal year 2017 appropriations bills are operating under a current continuing resolution which expires at the end of April and Congress and will continue to use the 2016 levels.

### **State Legislative Issues (February)**

February 17<sup>th</sup> was the deadline for bill introductions and approximately 2,600 to 2,700 bills were introduced in the state legislature for 2017. Mr. Crabbe provided a summary of the following two bills:

- AB 378 (C. Garcia), a cap and trade reauthorization; and
- SB 57 (Stern), addresses Aliso Canyon and the goal of determining the root cause of the natural gas leak there.

The Committee considered two infrastructure funding bills for possible position; AB 1 (Frazier) and SB 1 (Beall). Staff recommended working with the authors on AB 1 and SB 1 to secure amendments to provide funding for projects that will reduce air pollution and promote the development of zero and near-zero emission transportation technology and increasing funding for clean goods movement through region. The recommendations were accepted by the Legislative Committee. The Committee also considered the following bills for position:

- AB 193 (Cervantes), a bill creating the Clean Re-used Vehicle Rebate Project. The Committee accepted staff's recommendation to Support and Work with Author; and
- SB 53 (Hueso), relating to increased federal weight limits for heavy duty natural gas vehicles. The Committee accepted staff's recommendation to Support this bill.

The Legislative Committee approved proposed legislation for an SCAQMD sponsored bill, AB 1132 (C. Garcia). This bill would allow the executive officer to issue an order for abatement to stop toxic emissions if they are an imminent and substantial endangerment to public health or the environment, pending a hearing by the Hearing Board.

A special Legislative Committee meeting was held in February to obtain approval to introduce two additional bill proposals into the Legislature. The first bill proposal AB 1274 (O'Donnell) for an enhanced smog abatement fee, would provide increased funding for the Carl Moyer program. The second bill proposal was related to the creation of a port container cargo fee, which would help generate funding to support the recently passed 2016 AQMP. Both proposed legislations were approved by the Legislative Committee.

### **Federal Legislative Issues (March)**

The Trump Administration has proposed cuts to the U.S. Environmental Protection Agency's budget and other federal agencies, including a zeroing out of the Diesel Emission Reduction Act. These proposed cuts would need the approval of Congress and are currently being tracked by SCAQMD.

The Committee also considered the following bills for position:

- AB 582 (C. Garcia), which would address the Volkswagen cheat scandal. The Committee accepted staff's recommended position of Support with Amendments for this bill;
- AB 615 (Cooper), which would remove the sunset on provisions relating to the Clean Vehicle Rebate Project that secured more funding for and limited eligibility to lower income individuals. The Committee accepted staff's recommended position of Support for this bill;
- AB 1081 (Burke), which would provide a sales tax incentive to buy clean vehicles. The Committee recommended a position of Support with Amendments for this bill;
- AB 1083 (Burke), which would promote electric vehicle charging at state parks and beaches. The Committee accepted staff's recommended position of Support for this bill; and

- SB 174 (Lara), which deals with heavy duty diesel vehicle registrations. The Committee accepted staff's recommended position of Support with Amendments for this bill.

Mr. Crabbe summarized the policy principles proposed by staff to the Legislative Committee for adoption. These policy principles focused on the Cap-and-Trade or Greenhouse Gas Reduction Fund (GGRF) bills, which would allow for an annual allocation of 20 percent of GGRF monies to go to severe and extreme non-attainment areas for ozone with a focus on reducing air pollution and deployment of zero-emission and near-zero emission heavy duty vehicles for the benefit of air quality and public health impacts. The Committee approved these policy principles.

### **Discussion**

Art Montez inquired about CARB's Cap-and-Trade Program auction proceeds and the money the State Governor borrowed from distressed communities. Dr. Lyou indicated that the State can borrow the money for an indefinite period of time, and CARB's website provides information about the money collected.

Art Montez inquired of current legislation that offers incentive funding on energy efficient air conditioner units for buildings. Staff indicated that the California Energy Commission (CEC) might have funds available through local utilities.

***ACTION ITEM*** – *Art Montez requested information on specific CEC programs that have incentive funding for air conditioning units.*

Art Montez expressed concern about the future tracking of pollution from the Ports and rail systems, due to EPA budget cuts. Dr. Lyou indicated that EPA's emissions inventory data reflects information provided by SCAQMD and the Ports. Staff commented that the emissions reporting would continue, regardless of future EPA cutbacks.

Art Montez inquired about the various proceeds collected from the Carl Moyer Program, port fees, and other such programs, for disadvantaged communities and how a community could access these funds for purchasing school buses. Dr. Lyou indicated there are funds still available in the Carl Moyer Program and that data for investment funds are available on CARB's website. Staff commented that a draft report is now available, along with an interactive map.

***ACTION ITEM*** – *Dr. Lyou requested for staff to provide a link to CARB's Greenhouse Gas Reduction Fund report.*

Bill LaMarr inquired if AB 1132 is for toxic pollutants only or does it also pertain to other pollutants. Staff indicated that it applies to any imminent and substantial endangerment (ISE) to the public health or welfare or the environment.

Bill LaMarr indicated that he was under the impression that anything involving taxes and fees had to go to the public for a vote. Staff indicated it generally takes a 2/3 vote of legislature or of the public (ballot initiative).

David Rothbart inquired about AB 1132 and if the Hearing Board is obligated to hear a case quicker, since a business has only a few days to comply. Staff indicated that the bill language specifies the hearing must be held as soon as possible or practical, and no later than within 30 days.

Dr. Lyou inquired if an abatement order can be withdrawn if a business reacts quickly and an ISE no longer exists. Staff indicated that an order can be withdrawn, if the problem causing the ISE was shown to be permanently corrected.

Dr. Lyou commented on SB 174 which would deny truck owners the ability to submit a DMV vehicle registration or transfer of ownership without a confirmation of compliance with CARB's regulations, and the estimation of 30% of the trucks currently on the road in California are in non-compliance. Staff indicated that the CARB's replacement or retrofit schedule starts with the older trucks first, and the youngest truck affected by this regulation is 14 years old.

Dr. Lyou inquired about SB 638, a similar bill which requires a smog-check for heavy duty vehicles. Staff indicated that this bill could be a spot bill and they could review this bill.

#### **UPDATE REGARDING LITIGATION ITEMS AND RELATED EPA ACTIONS**

William Wong commented that there was one update to add to the litigation status report provided.

- A complaint was filed by Aerocraft, which indicated they are seeking relief from prior curtailments and challenging the District's exceedance data.

#### **UPDATE ON EFFORTS IN PARAMOUNT TO ADDRESS HEXAVALENT CHROMIUM**

Susan Nakamura provided an overview of SCAQMD's efforts in the city of Paramount regarding monitoring, identification of sources, and the reduction of hexavalent chromium.

#### **Discussion**

Art Montez commented that we should be able to know what health impact and learning disabilities are attributed to environmental sources. Dr. Lyou explained the difficulty of conducting health studies and making specific conclusions, and emphasized that it is more effective to focus on reducing the pollution at the source to reduce overall health risk.

Art Montez inquired about the impacts of exposure. Staff indicated that hexavalent chromium is a known carcinogen and the main exposure risk is cancer, primarily lung cancer.

Dr. Philip Fine explained how this is an unprecedented example of inter-agency coordination, not only at the local level but also at the State and Federal levels. This advisory group also deals with multiple levels of government, and we wanted to provide this update as an example of how our agency through weekly telephone calls coordinates with various agencies at all levels. One of the agencies that we coordinate with is the Los Angeles County Public Health. They have reviewed our communications and risk evaluations data and they have concurred with the findings.

Art Montez inquired if SCAQMD has met with the local schools and health clinics to inquire if there are chronic breathing issues, or other health related issues. Staff indicated that we are coordinating with the school districts and they are part of our weekly telephone updates, and Los Angeles County Public Health could possibly provide information on long term health impacts.

TyRon Turner inquired if facilities are aware of the air sample schedule. Staff indicated they might, but there are off-schedule sample days to ensure that facilities are not coordinating activities based on the schedule.

TyRon Turner asked if there are monitors in areas other than near schools. Staff replied yes.

Tyron Turner inquired who is monitoring the water. Dr. Lyou indicated the Los Angeles Regional Water Quality Control Board. Staff commented that the Department of Toxics Substance Control is monitoring the soil.

David Rothbart asked questions regarding the type of sampler and the filter. Staff explained the details of the type of sampler and the challenges with analyzing hexavalent chromium.

David Rothbart asked about the sampling techniques being used. Staff explained the details of the type of sampler and the challenges with analyzing hexavalent chromium.

Bill LaMarr indicated that he is encouraged by the monitoring and studies being conducted, and acknowledged the fear and vulnerability experienced by the community and businesses too. Mr. LaMarr expressed his concern about future rulemaking, the importance of working with the stakeholders, and imposing regulations that could put this type of industry out of business. He also noted that many business owners live near and in the communities where they operate their businesses. Dr. Lyou asked Mr. LaMarr how he liked the development of Rule 1430 and indicated that staff has demonstrated that they can approach rulemaking in a systematic and fair approach. Wayne Nastri indicated that we understand the concerns and we are sensitive to the impacts on businesses, and in the rulemaking process we are also looking at technology advancement for these types of facilities. Staff commented the reason we are going back to look at these rules is because new information has come forward, that no one was aware of before for hexavalent chromium, and the gaps in the rules must be addressed.

## **CONSENSUS BUILDING**

There was no report.

## **SUBCOMMITTEE STATUS REPORTS**

### ***A. Freight Sustainability (Dan McGivney)***

There was no report.

### ***B. Small Business Considerations (Bill LaMarr)***

There was no report.

### ***C. Environmental Justice (Curt Coleman)***

Curt Coleman mentioned the upcoming OEHHA Children's Environmental Health Symposium on April 26, 2017 in Sacramento.

### ***D. Climate Change (David Rothbart)***

Frank Caponi provided updates on future changes and legislative bills going forward in 2017.

## **REPORT FROM AND TO THE STATIONARY SOURCE COMMITTEE**

Dr. Philip Fine reported on the following items for the March 2017 meeting.

- Report on advanced remote sensing technologies to measure emissions from refineries and other sources.
- Update on Proposed Amended Rules 219 and 222.

### **Discussion**

Art Montez inquired if there is consideration to protect the workers of regulated businesses, and during rulemaking is there an effort made to keep companies from shutting down. Dr. Lyou indicated that Cal/OSHA oversees worker health conditions. He further explained that during the rulemaking process, we work with other regulatory agencies and impact analyses are conducted. Staff added that SCAQMD works with facilities through our engineer and inspector teams to identify potential sources and encourage them to work with us, to reduce the risks to their employees and the communities.

### **OTHER BUSINESS**

TyRon Turner commented how he had recently attended a Neighborhood Council community meeting and was surprised that many city officials did not know the role of the SCAQMD. He was asked to inquire how often SCAQMD attends community relations events and if staff could attend future meetings. Staff indicated that LPA staff regularly attend monthly Council of Government and City Manager meetings. Staff further explained how SCAQMD is working to enhance communications by reaching out to city officials when a Notice of Violation is issued to a facility within their jurisdiction, so that City Councils are not surprised if extended monitoring or enforcement action is needed.

***ACTION ITEM** – Dr. Lyou requested that LPA staff follow-up with TyRon Turner for future meetings, and Dr. Philip Fine requested an LPA presentation on their outreach efforts with businesses, local government and communities.*

### **PUBLIC COMMENT**

There were no public comments.

### **ADJOURNMENT**

The meeting was adjourned at 12:15 p.m. The next meeting of the Home Rule Advisory Group is scheduled for 10:00 a.m. on May 10, 2017, and will be held at SCAQMD in Conference Room CC-8.

BOARD MEETING DATE: June 2, 2017

AGENDA NO. 23

REPORT: Mobile Source Committee

SYNOPSIS: The Mobile Source Committee met on Friday, May 19, 2017 at SCAQMD headquarters in Diamond Bar. The following is a summary of that meeting.

RECOMMENDED ACTION:  
Receive and file.

Dr. Clark E. Parker, Sr., Chair  
Mobile Source Committee

PMF:AF

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### **Attendance**

Chair Dr. Clark E. Parker, Sr., and Committee Member Supervisor Marion Ashley attended via videoconference. Vice Chair Dr. Joseph Lyou, and Committee Members Sheila Kuehl, Judith Mitchell, and Larry McCallon attended at SCAQMD headquarters in Diamond Bar. Chair Parker called the meeting to order at 9:00 a.m.

### **ACTION ITEM:**

#### **1. Authorize Staff to Submit Letter of Support for CARB Locomotive Petition to U.S. EPA**

Ms. Barbara Baird, Chief Deputy Counsel, provided background regarding CARB's petition to U.S. EPA to establish more stringent standards for new and remanufactured locomotives. U.S. EPA most recently updated its standards in 2008 for locomotives built in 2015 and later. CARB requested that the standards for new locomotives be set at 0.2 g/bhp-hr for NO<sub>x</sub> and less than 0.01 g/bhp-hr for PM, effective with locomotives built in 2025 and later. CARB also requested that these new locomotives be able to operate in zero-emissions mode in designated areas, which could be accomplished through technologies such as a battery-tender car. The proposed standards for remanufactured locomotives would be less stringent but would go into effect in 2023. Locomotives are significant sources of NO<sub>x</sub>, contributing more NO<sub>x</sub> than all the RECLAIM NO<sub>x</sub> sources. They also emit diesel particulate, a cancer-causing air contaminant. Ms. Baird asked the Committee to recommend approval for authorizing staff to submit to U.S. EPA a letter of support for CARB's petition.



Dr. Parker asked how much cleaner Tier 5 engines would be. Staff responded that there would be a 65% reduction compared to Tier 4 engines. In response to an inquiry from Mayor Pro Tem McCallon, Ms. Baird explained that the standards would apply to locomotives built beginning in 2025, but would not require any transit agency to purchase a new locomotive more quickly than it otherwise would. Dr. Lyou suggested adding legal arguments regarding the need to update the standards and the need for a prompt response to the petition. (The draft letter has been revised to add this language). Supervisor Ashley commented that there are more than 65 trains per day passing through his district. Councilmember Mitchell suggested working with CARB to see if they would want any assistance in obtaining additional letters of support from air pollution agencies. Dr. Lyou asked whether staff had discussed with CARB the potential for U.S. EPA adopting a rule to require freight operators to route their cleanest locomotives to this area. Dr. Philip Fine, Deputy Executive Officer/Planning, Rule Development and Area Sources, replied that this is an ongoing conversation, but the railroads have generally been opposed.

Moved by Mitchell; seconded by McCallon, unanimously approved

Ayes: *Ashley, Kuehl, Lyou, McCallon, Mitchell, Parker*

Noes: *none*

Absent: *none*

## **INFORMATIONAL ITEMS:**

### **2. Facility–Based Mobile Source Measures Update**

Mr. Ian MacMillan, Planning and Rules Manager, provided an overview of Facility-Based Mobile Source Measures in the 2016 AQMP. Mayor Pro Tem McCallon asked if the AQMP airport control measure was applicable to cargo airports and staff clarified the program was applicable to all commercial airports including cargo airports, but not to aircraft emissions. Mayor Pro Tem McCallon recommended that impacts on small airports be considered. Supervisor Kuehl and Dr. Lyou provided suggestions for staff to describe targets for the voluntary efforts and the possible triggers that would initiate the rule development process if the voluntary goals were not met. Staff indicated that part of the early efforts of the Working Groups is identifying the existing regulatory landscape and technologies and setting appropriate targets and metrics. Executive Officer Wayne Nastri indicated that staff is working on detailed objectives, goals and timelines for future meetings to provide certainty for all stakeholders.

Councilmember Mitchell added that SCAQMD provided comments on the Port's Clean Air Action Plan requesting information on benchmarks and interim milestones toward meeting the clean air objectives. Dr. Parker and Supervisor Ashley also suggested for future working group meetings that staff should describe SCAQMD's limited jurisdiction on mobile sources.

3. **Rule 2202 On-Road Motor Vehicle Mitigation Options Annual Update 2016**

An update for Calendar Year 2016 for Rule 2202 - On-Road Motor Vehicle Mitigation Options was presented by Carol Gomez, Planning and Rules Manager. Rule 2202 requires employers with 250 or more employees to implement an emissions reduction program to reduce mobile source emissions generated by employee commutes during peak hours. Over 1,300 worksites were regulated by this program.

Employers may select one of three program options to comply with Rule 2202: an Employee Commute Reduction Program (ECRP), Emissions Reduction Strategies (ERS), or an Air Quality Investment Program (AQIP). The ECRP requires employers to develop and implement an employee trip reduction program to assist in reaching an average vehicle ridership (AVR) goal. The ERS requires employers to surrender mobile source emission reduction credits; and the AQIP requires payment into a fund which the SCAQMD utilizes to fund mobile source emission reduction projects, such as the leaf blower exchange program.

Information was provided on the compliance component of the program that includes an audit process triggered by complaints and/or staff requests.

Dr. Parker commented that he understands that we have incentive programs for people to purchase cleaner vehicles, but asked if we can offer an incentive for people to retire old, high-emitting vehicles. Staff responded that there is a car scrapping program that offers a \$1,500 payment to retire an old vehicle that meets the scrapping requirements; however, the program is funded and run by CARB. The SCAQMD assists with the administration of the program. Mr. Nastri stated that a full description of the vehicle scrapping program and Enhanced Fleet Modernization Program will be provided at the next Mobile Source Committee meeting.

Dr. Lyou stated that he thought with regard to any future Rule 2202 amendments, that priority should be given to projects with NOx emission reductions, and that we should look into of new transportation projects funded by Measure M funds going forward. Dr. Lyou then asked what our thoughts were on any future amendments. Dr. Fine responded that in the future we will get diminishing returns with efforts to reduce vehicle trips due to cleaner vehicles. So, the effort would be focused on streamlining the resource-intensive ECRP program, looking for ways to focus on

more cost-effective emission reduction projects, and working with stakeholders from the regulated community on viable compliance options for the future.

**WRITTEN REPORTS:**

4. **Rule 2202 Activity Report: Rule 2202 Summary Status Report**

The written report was received.

5. **Monthly Report on Environmental Justice Initiatives: CEQA Document Commenting Update**

The written report was received.

**OTHER MATTERS:**

6. **Other Business:**

There was no other business.

7. **Public Comments:**

There were no public comments.

8. **Next Meeting Date**

The next regular Mobile Source Committee meeting is scheduled for Friday, June 16, 2017 at 9:00 a.m.

9. **Adjournment**

The meeting adjourned at 10:00 a.m.

**Attachment**

Attendance Record

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**MOBILE SOURCE COMMITTEE MEETING**  
**Attendance Roster – May 19, 2017**

Dr. Clark E. Parker (via videoconference) .....	SCAQMD Governing Board
Supervisor Marion Ashley (via videoconference).....	SCAQMD Governing Board
Dr. Joseph Lyou .....	SCAQMD Governing Board
Supervisor Sheila Kuehl .....	SCAQMD Governing Board
Mayor Pro Tem Larry McCallon.....	SCAQMD Governing Board
Councilmember Judith Mitchell .....	SCAQMD Governing Board
Board Consultant David Czamanske .....	SCAQMD Governing Board (Cacciotti)
Board Consultant Ron Ketcham .....	SCAQMD Governing Board (McCallon)
Board Consultant Diane Moss .....	SCAQMD Governing Board (Kuehl)
Board Consultant Andrew Silva .....	SCAQMD Governing Board (Rutherford)
Wayne Nastri .....	SCAQMD Staff
Jill Whynot .....	SCAQMD Staff
Philip Fine.....	SCAQMD Staff
Barbara Baird.....	SCAQMD Staff
Derrick Alatorre.....	SCAQMD Staff
Jo Kay Ghosh.....	SCAQMD Staff
Laki Tisopulos .....	SCAQMD Staff
Sam Atwood .....	SCAQMD Staff
Arlene Farol.....	SCAQMD Staff
Carol Gomez .....	SCAQMD Staff
Jeff Inabinet .....	SCAQMD Staff
Ian MacMillan .....	SCAQMD Staff
Ryan Stromar .....	SCAQMD Staff
Jillian Wong.....	SCAQMD Staff
Thomas Jelenic .....	Pacific Merchant Shipping Association
William LaMarr .....	California Small Business Alliance
Lauren Nevitt .....	SoCalGas
Bill Pearce.....	The Boeing Company
David Rothbart .....	Los Angeles Sanitation Districts
Susan Stark .....	Tesoro

BOARD MEETING DATE: June 2, 2017

AGENDA NO. 24

REPORT: Stationary Source Committee

SYNOPSIS: The Stationary Source Committee met Friday, May 19, 2017.  
Following is a summary of that meeting.

RECOMMENDED ACTION:  
Receive and file.

Ben Benoit, Chair  
Stationary Source Committee

LT:eb

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### **Attendance**

The meeting began at 10:30 a.m. In attendance at SCAQMD Headquarters in Diamond Bar were Committee Chair Ben Benoit and Committee Members Judith Mitchell, Dr. Joseph Lyou, and Sheila Kuehl. Committee Member Janice Rutherford participated via videoconference. Committee Member Shawn Nelson was absent.

### **INFORMATIONAL ITEMS**

#### **1. Nonattainment New Source Review Compliance Demonstration for 2008 Ozone Standard**

Michael Krause, Planning and Rules Manager, explained that this action is an administrative procedure in response to U.S. EPA's Finding of Failure to Submit to demonstrate compliance with the nonattainment new source review (NSR) requirement in the Clean Air Act for the 2008 ozone standard for the South Coast Air Basin and Coachella Valley. Staff thought the SCAQMD was already in compliance with the requirement since the NSR and RECLAIM rules have already been federally approved. U.S. EPA, however, is seeking a more detailed demonstration of each NSR requirement and for the SCAQMD Board to certify, or approve, the compliance demonstration.

Dr. Lyou asked if there would be information for the Board to review. Staff replied that the complete nonattainment NSR compliance demonstration would be part of the Board package for the June meeting at which time certification is being sought by the full Board.

**2. Supplemental RACM/RACT Analysis for the 2006 24-hr PM<sub>2.5</sub> and 2008 8-hr Ozone Standards**

Mr. Krause noted that this action is also an administrative procedure to demonstrate that the 2010 and 2015 RECLAIM amendments satisfy Reasonably Available Control Technology (RACT) requirements pursuant to the Clean Air Act. The RECLAIM program is required by the California Health & Safety Code to be equivalent to the Best Available Retrofit Control Technology (BARCT), which is more stringent than RACT. Nevertheless, a U.S. EPA's disapproval has triggered a sanction clock. Timing of approval is critical especially since CARB will need to approve this item before submitting to the U.S. EPA for final approval and stopping the sanction clock. The sanction clock will cause an increase in the offset ratio if not resolved by November 16, 2017. To assist in this matter, U.S. EPA recommended a parallel review process for CARB before the SCAQMD Board considers approval at their July Board meeting. Committee Members did not express any concern with staff proceeding with the parallel review process.

**3. Proposed Amended Rule 1118 – Control of Emissions from Refinery Flares**

Ian MacMillan, Planning and Rules Manager, presented a summary of proposed amendments to Rule 1118. Additional changes may be proposed for this rule based on information received per this proposed amendment. Dr. Lyou noted that flaring emits toxic pollutants and inquired about them. Staff responded that there is limited information from controlled studies, but real-world flaring events are much more difficult to sample. Dr. Lyou inquired about flaring destruction efficiency and expressed concern with the use of emission factors. Staff responded that the new U.S. EPA Refinery Sector Rule includes many provisions to ensure a higher destruction efficiency and that the optical remote sensing pilot study being proposed shows promise to move away from emission factors towards more direct measurement of flaring. Mayor Pro Tem Benoit concurred that this was a good approach. Dr. Lyou requested that flaring event public notices be enhanced with additional information. Staff replied that they are looking into this in parallel with the rulemaking. Councilmember Mitchell confirmed with staff that there are no financial impacts to refineries expected from removing the annual cap on mitigation fees unless an unforeseeable major incident with flaring were to occur. Supervisor Kuehl asked if there are best practices that can be recommended. Staff replied that each refinery has a unique and complicated process, and that the Scoping Documents in the proposed amended rule will provide the necessary detailed level of engineering analysis to identify future actions to further reduce flaring emissions.

Bridget McCann, representing the Western States Petroleum Association, commented that she appreciates the productive meetings that have occurred between the refineries and SCAQMD staff. She noted that the rule schedule is fast, and hopes that they will not have to ask for an extension. Jim Rebeel from Air Products Inc. commented that they are generally supportive of the rule amendments and appreciate the discussions they have had with staff, especially with regard to the specific concerns for hydrogen plants.

Jaimine Parekh, an attorney for Communities for a Better Environment, supports the efforts to amend the rule. She requested some specific changes to the proposed amended rule including that the SOx performance target be reduced to 0.1 tons/million barrels, that a new VOC performance target be established, that all facilities prepare a Flare Minimization Plan, that the clean service flare emission factor be updated, that inspectors continue to verify that no vent gas lines bypass flare monitors, that the Essential Operational Needs provisions in the rule be tightened, and to remove a proposed Specific Cause Analysis exemption. Following a request from Councilmember Mitchell to respond, staff replied that before the SOx performance target can be reduced, a feasibility analysis must be conducted, which is what the proposed Scoping Documents are designed to accomplish, and that because VOCs are difficult to measure, a performance target for them is not appropriate at this time, though the proposed optical remote sensing pilot study should provide more information on this for the second phase of rulemaking. Staff also mentioned that the U.S. EPA Refinery Sector Rule includes a Flare Minimization Plan, and the proposed Scoping Documents will also evaluate ways to reduce flaring in the future. Mayor Pro Tem Benoit asked about enforceability, and staff responded that there are provisions being added to reflect the U.S. EPA rule that have specific enforcement provisions. Staff also noted that the Essential Operational Needs and Specific Cause Analyses sections of the rule will be clarified and tightened, that the clean service emission factors are being researched, and verified that all facilities had been inspected to ensure that no bypass lines exist. Mayor Pro Tem Benoit requested that the proposed amended rule be brought back before this committee before it goes to the full Board for adoption.

#### **4. Proposed Rule 1466 – Control of Particulate Emissions From Soils with Toxic Air Contaminants**

Susan Nakamura, Assistant Deputy Executive Officer/Planning, Rule Development & Area Sources, presented a summary of Proposed Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants. In response to Dr. Lyou's question, staff confirmed that one of the criteria for the Executive Officer to consider for applicability of Proposed Rule 1466 is distance to sensitive receptors. In response to a question from Councilmember Mitchell, staff explained that PM10 was being used as a surrogate to monitoring individual toxic air contaminants to provide real-time data. Dr. Philip Fine, Deputy Executive Officer/Planning, Rule Development & Area Sources, explained that analyzing

specific toxic air contaminants would require laboratory analysis which would be at least a three-day turnaround time. Supervisor Kuehl wanted to know if there were any provisions in the rule for trucks once they leave a site. Ms. Nakamura responded that the rule has requirements for egress and tarping of trucks. Executive Officer Wayne Nastri and Dr. Fine clarified that transportation of toxic materials is under the authority of the Department of Transportation and that sites would have to follow these regulations in addition to Proposed Rule 1466. Dr. Lyou discussed demolition activity near Exide where there were issues regarding communication with other agencies and planning departments and suggested an outreach and education component to the proposed rule. Mr. Nastri agreed that there needs to be increased awareness and outreach. Mayor Pro Tem Benoit stated his support of the additional provisions at school and early education centers. In response to Supervisor Kuehl's comment, staff agreed that health agencies such as the Department of Health Services should be consulted when the Executive Officer is designating a site. In response to Mr. David Pettit of Natural Resources Defense Council's comments regarding why only monitor for PM10 and not specific toxic air contaminants such as lead, Dr. Fine responded that PM10 gives real-time data of what is occurring at a site and there are no real-time monitors for lead. In response to a comment from Mr. William Pearce, representing Boeing, staff is working on provisions to address his request to exclude certain provisions such as monitoring and signage for small projects.

### **WRITTEN REPORTS**

All written reports were acknowledged by the Committee.

### **OTHER BUSINESS**

There was no other business.

### **PUBLIC COMMENTS**

There were no public comments.

The next Stationary Source Committee meeting is scheduled for June 16, 2017. The meeting was adjourned at 11:45 a.m.

### **Attachment**

Attendance Roster



**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
STATIONARY SOURCE COMMITTEE**

**May 19, 2017**

**Attendance Roster (Voluntary)**

Mayor Pro Tem Ben Benoit .....	SCAQMD Governing Board
Dr. Joseph Lyou.....	SCAQMD Governing Board
Councilmember Judith Mitchell .....	SCAQMD Governing Board
Supervisor Sheila Kuehl .....	SCAQMD Governing Board
Supervisor Janice Rutherford (videoconference) .....	SCAQMD Governing Board
Board Consultant David Czamanske.....	SCAQMD Governing Board (Cacciotti)
Board Consultant Ron Ketcham.....	SCAQMD Governing Board (McCallon)
Board Consultant Andrew Silva.....	SCAQMD Governing Board (Rutherford)
Wayne Nastri .....	SCAQMD staff
Barbara Baird.....	SCAQMD staff
Bill Wong .....	SCAQMD staff
Philip Fine.....	SCAQMD staff
Laki Tisopulos .....	SCAQMD staff
Jill Whynot .....	SCAQMD staff
Amir Dejbakhsh.....	SCAQMD staff
Susan Nakamura .....	SCAQMD staff
Bill LaMarr .....	California Small Business Alliance
Bill Pearce.....	Boeing
Rita Loof.....	RadTech
Jim Reebeel .....	Air Products Inc.
Patty Senecal.....	Western States Petroleum Association
Lauren Nevitt .....	SoCalGas
Bridget McCann .....	Western States Petroleum Association

BOARD MEETING DATE: June 2, 2017

AGENDA NO. 25

REPORT: Technology Committee

SYNOPSIS: The Technology Committee met on May 19, 2017. Major topics included Technology Advancement items reflected in the regular Board Agenda for the June Board meeting. A summary of these topics with the Committee's comments is provided. The next Technology Committee meeting will be held on June 16, 2017.

RECOMMENDED ACTION:  
Receive and file.

Joe Buscaino, Chair  
Technology Committee

MMM:pmk

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**Attendance:** Supervisor Sheila Kuehl, Mayor Pro Tem Larry McCallon, Councilmember Judith Mitchell and Councilmember Dwight Robinson were in attendance at SCAQMD headquarters. Councilmember Joe Buscaino (arrived at 12:10 p.m.) and Supervisor Janice Rutherford participated by videoconference.

## JUNE BOARD AGENDA ITEMS

*Vice Chair Kuehl called the meeting to order at 12:05 p.m.*

### 1. **Reallocate Funding Sources for Awarded Projects Under Carl Moyer Program**

On October 7, 2016, the Board awarded contracts under the FY 2015-16 “Year 18” Carl Moyer Program, including two contracts executed for \$249,050 to repower a marine vessel and \$627,873 to replace one off-road agricultural equipment from the Carl Moyer Program Fund (32). Subsequently, staff identified \$225,136 in turn-back funds from withdrawn projects from a 2012 Diesel Emissions Reduction Act (DERA) grant. This action is to amend both contracts, substituting \$225,136 in Carl Moyer funds with the unencumbered portion of the 2012 DERA grant in the Advanced Technology, Outreach and Education Fund (17).

*Moved by McCallon; seconded by Mitchell; unanimously approved.*

*Ayes: Kuehl, McCallon, Mitchell, Robinson and Rutherford*

*Noes: None*

*Absent: Buscaino*

**2. Execute Contract for Secondary Organic Aerosol Formation Study and Amend Technical Assistance Contracts for In-Use Emissions Testing for Heavy-Duty Vehicles**

Secondary organic aerosol (SOA) is an important component of suspended fine atmospheric particulate matter with significant environmental risks. Design of an effective emission control strategy to reduce the risks requires further understanding of the formation of SOA. As part of an in-use emissions test previously approved by the Board, staff is proposing to assess SOA concentrations from heavy-duty diesel and natural gas vehicles. These actions are to execute a contract with University of California Riverside CE-CERT to evaluate the SOA formation from heavy-duty diesel and natural gas vehicles and amend contracts with Gladstein, Neandross & Associates, LLC, and AEE Solutions, LLC, to provide technical assistance for in-use emissions testing for heavy-duty vehicles at a total cost not to exceed \$85,000, \$50,000 and \$50,000, respectively, from the Clean Fuels Fund (31).

*Mayor Pro Tem McCallon asked if there are any incentives for fleets to participate in the in-use emissions study and whether trucks provided would be representative of the heavy-duty truck population. Staff responded that the study will assist fleets in identifying operational strategies to help reduce fuel consumption and provide information on new vehicle technology eligible for incentive funding programs.*

*Councilmember Robinson asked whether trucks in the in-use emissions study will be selected from a pool of trucks in previous similar in-use emissions studies. Staff responded that the trucks for this study will be selected from the same pools as those that were tested under previous in-use emission studies, particularly to continue assessing the performance of aftertreatment technologies over time.*

*Supervisor Kuehl asked if there is any plan to assess emissions benefits from biogas and renewable gas other than natural gas and diesel. Staff responded that the study will assess vehicles fueled with conventional and renewable diesel and natural gas as well as alternative technologies such as hybrid and fully electric technologies.*

*Moved by Robinson; seconded by McCallon; unanimously approved.*

*Ayes: Buscaino, Kuehl, McCallon, Mitchell, Robinson and Rutherford*

*Noes: None*

*Absent: None*

**3. Other Business:** *There was no other business.*

**4. Public Comments:** *There were no public comments.*

**Next Meeting: June 16, 2017**

**Attachment**

Attendance

## ATTACHMENT

### SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT TECHNOLOGY COMMITTEE MEETING

Attendance – May 19, 2017

Councilmember Joe Buscaino (via videoconference) .....	SCAQMD Governing Board
Supervisor Sheila Kuehl .....	SCAQMD Governing Board
Mayor Pro Tem Larry McCallon .....	SCAQMD Governing Board
Councilmember Judith Mitchell .....	SCAQMD Governing Board
Councilmember Dwight Robinson .....	SCAQMD Governing Board
Supervisor Janice Rutherford (via videoconference) .....	SCAQMD Governing Board
Ron Ketcham .....	Board Consultant (McCallon)
Andrew Silva .....	Board Consultant (Rutherford)
Wayne Nastri .....	SCAQMD Staff
Barbara Baird .....	SCAQMD Staff
Fred Minassian .....	SCAQMD Staff
Vicki White .....	SCAQMD Staff
Brian Choe .....	SCAQMD Staff
Drue Hargis .....	SCAQMD Staff
Adewale Oshinuga .....	SCAQMD Staff
Greg Ushijima .....	SCAQMD Staff
Todd Warden .....	SCAQMD Staff
Gregory Rowley .....	SCAQMD Staff
Tribrina Brown .....	SCAQMD Staff
Marjorie Eaton .....	SCAQMD Staff
Donna Vernon .....	SCAQMD Staff
Pat Krayser .....	SCAQMD Staff

BOARD MEETING DATE: June 2, 2017

AGENDA NO. 26

REPORT: Mobile Source Air Pollution Reduction Review Committee

SYNOPSIS: Below is a summary of key issues addressed at the MSRC's meeting on May 18, 2017. The next meeting is scheduled for Thursday, June 15, 2017, at 2:00 p.m., in Conference Room CC8.

RECOMMENDED ACTION:  
Receive and file.

Ben Benoit  
SCAQMD Representative on MSRC

MMM:FM:psc

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### **Meeting Minutes Approved**

The MSRC unanimously approved the minutes of the February 16 and March 16, 2017 meetings. Those approved minutes are attached for your information (*Attachments 1 and 2*).

### **MSRC Chair Re-Appointed and MSRC Vice-Chair Re-Appointed**

Annually the MSRC elects its chair and vice-chair. At its May 18, 2017 meeting, the MSRC unanimously re-appointed Greg Pettis as its chair for another one-year term. Mr. Pettis is Mayor Pro Tem for the City of Cathedral City and represents the Riverside County Transportation Commission on the MSRC. The MSRC also unanimously re-elected Larry McCallon as its MSRC vice-chair. Mr. McCallon is Mayor Pro Tem for the City of Highland and represents the San Bernardino Associated Governments (SANBAG) on the MSRC.

### **FYs 2016-18 Major Event Center Transportation Program (PA2017-05)**

As part of its FYs 2016-18 Work Program, the MSRC allocated \$5,000,000 for event center transportation programs and released Program Announcement #PA2017-05. The Program Announcement solicits applications from qualifying major event centers and/or transportation providers to provide transportation service for venues not currently served by sufficient transportation service. To date, the MSRC has awarded \$503,272 to one project. The MSRC considered recommendations concerning an additional application submitted by Orange County Transportation Authority (OCTA). OCTA

requested the MSRC to consider an award of \$834,222 to provide special bus service to the Orange County Fair in 2017 and 2018. Service would be provided on Saturdays and Sundays for the five July and August weekends of each Fair season, beginning at 10:00 a.m. and continuing hourly until 1:00 a.m., and would travel between nine existing transit facilities and the fairgrounds in Costa Mesa to maximize the potential for riders to complete the greater portion of their trip via transit. The service will utilize model year 2008 CNG buses initially, but begin phasing in buses repowered with the Cummins ISL G near-zero engine during the 2017 Fair season. It is intended that the 2018 service would be implemented using exclusively near-zero engine equipped buses. OCTA would contribute \$1,061,598 in co-funding. The MSRC approved a contract award to OCTA in an amount not to exceed \$834,222 as part of the FYs 2016-18 Work Program. This contract award will be considered by the SCAQMD Board at its June 2, 2017 meeting.

#### **FYs 2012-14 Signal Synchronization Partnership Program**

In July 2014, the MSRC approved an award to Riverside County Transportation Commission (RCTC) in an amount not to exceed \$310,375 to implement signal coordination and related projects along the Highway 111 corridor within the Coachella Valley portion of Riverside County; this award was combined with earlier awards to RCTC under one contract. The Coachella Valley Association of Governments' evaluation committee subsequently made the recommendation that signal synchronization projects should be completed regionally, rather than "city to city" or even one major roadway at a time, to ensure that the project areas are interconnected. RCTC proposed to expand the scope to cover nine cities as well as unincorporated areas. The project would continue to include signal upgrades, communication systems, hardware and software improvements, and a Traffic Management Center. Total project cost is now estimated at \$10,800,000, and the MSRC contribution would remain constant at \$310,375. The MSRC considered and approved RCTC's requested contract modification. This contract modification will be considered by the SCAQMD Board at its June 2, 2017 meeting.

#### **FYs 2016-18 Natural Gas Infrastructure Program**

The MSRC approved release of Program Announcement #PA2017-07 under the FYs 2016-18 Work Program. The Program Announcement, with a targeted funding level of \$4.0 million, provides funds for new and expanded natural gas stations, as well as for the upgrade of existing vehicle maintenance facilities. Stations will be eligible for up to 50 percent of station capital equipment, site construction, signage, and reasonable project management costs, not to exceed the specified maximum award amounts. The maximum MSRC funding per project varies from \$100,000 to \$275,000 depending upon whether the applicant is a public or private entity, accessibility level of the proposed project, and the number of fuels offered. Additionally, projects may be eligible for a \$100,000 bonus if they commit to use at least 50% renewable natural gas for a minimum of five years. Lastly, the program offers funding for training technicians

in the maintenance of natural gas vehicles and equipment, with a maximum per-entity award of \$15,000 and an overall cap of \$150,000. Proposals meeting requirements will be funded on a first-come, first-served basis. The RFP includes an open application period commencing with its release on June 2, 2017, and closing June 29, 2018, and projects will be brought to the MSRC for consideration of awards throughout the application period. The SCAQMD Board will consider the release of Program Announcement #PA2017-07 at its June 2, 2017 meeting.

### **MSRC Technical Advisor Services**

The MSRC retains a Technical Advisor for programmatic and technical assistance. At their May 18, 2017 meeting, the MSRC approved release of an RFP #P2017-15 to solicit Technical Advisor services for an initial 27-month period beginning October 1, 2017, including a 24-month option term to extend, as part of the FYs 2016-18 Work Program. The purpose of the Technical Advisor is to provide independent, objective assistance and advice to the MSRC and the MSRC's Technical Advisory Committee. The RFP establishes the following scoring criteria: Technical Qualifications/Experience; Technical Approach; Proposed Cost; Past Performance; and DVBE/Local Business/Small Business status. So long as expertise and qualifications meet the requirements, individually or collectively, proposals may be submitted by: 1) a single independent contractor, 2) two or more independent contractors submitting a joint proposal; or 3) a consulting firm designating a team of key personnel. Proposals are due by July 13, 2017. The SCAQMD Board will consider the release of RFP#P2017-15 at its June 2, 2017 meeting.

### **Update on Concepts for MSRC Infrastructure Program**

In October 2016, the MSRC established initial categories for its FYs 2016-18 Work Program. One of the categories designated for consideration was Alternative Fuel Infrastructure. The MSRC-TAC Infrastructure Subcommittee developed a conceptual framework for how the MSRC can partner with other stakeholders in order to support the increased deployment of multiple alternative fuel types. The Infrastructure Partnership is a proposed concept between MSRC, SCAQMD, and CEC. The proposed Partnership level is \$25M, with the MSRC contribution to the Partnership being \$8M. Three infrastructure categories were proposed: 1) Natural Gas Refueling, with an added bonus to commitment to use Renewable Natural Gas, 2) Electric Vehicle Charging (EVSE); and 3) Hydrogen Refueling, to construct four new H<sub>2</sub> Refueling Facilities within the SCAQMD region. The MSRC gave the green light to initiate Partnership formation discussions and directed staff to bring back a final plan for MSRC review & approval.

### **Contract Modification Requests**

The MSRC considered three contract modification requests and took the following actions:

1. The City of Baldwin Park, Contract #ML12045, which provides \$400,000 to install a new CNG Station, a 18-month extension;
2. For the City of Palm Desert, Contract #ML16072, which provides \$56,000 to install an EV Charging Station, a 2-year term extension till December 2021; and
3. For Riverside County Transportation Commission (RCTC), Contract #MS14059, which provides \$1,250,000 to monitor signals along the Highway 111 corridor, expand the scope to cover nine cities as well as unincorporated areas, with no increase in cost to the MSRC.

### **Received and Approved Final Reports**

The MSRC received and unanimously approved two final report summaries this month as follows:

1. Ware Disposal, Contract #MS12034 which provided \$133,070 for the Purchase of 8 Medium-Heavy Duty Vehicles; and
2. Orange County Transportation Authority, Contract #MS14058 which provided \$1,250,000 to Implement Various Traffic Signal Synchronization Projects.

### **Contracts Administrator's Report**

The MSRC's AB 2766 Contracts Administrator provides a written status report on all open contracts from FY 2004-05 through the present. The Contracts Administrator's Report for May, 2017 is attached (*Attachment 3*) for your information.

### **Attachments**

Attachment 1 – Approved February 16, 2017 Meeting Minutes

Attachment 2 – Approved March 16, 2017 Meeting Minutes

Attachment 3 – May 2017 Contracts Administrator's Report





**MOBILE SOURCE AIR POLLUTION REDUCTION REVIEW COMMITTEE**  
**THURSDAY, FEBRUARY 16, 2017 MEETING MINUTES**  
21865 Copley Drive, Diamond, Bar, CA 91765- Conference Room CC-8

**MEMBERS PRESENT:**

(Chair) Greg Pettis, representing RCTC  
(Vice Chair) Larry McCallon, representing SANBAG  
Michael Carter (Alt.) representing California Air Resources Board  
Dolores Roybal Saltarelli, representing Regional Rideshare Agency (via v/c)  
Tim Shaw (Alt.), representing OCTA  
Mark Yamarone (Alt.), representing Los Angeles County MTA (via v/c)

**MEMBERS ABSENT:**

Ben Benoit (Alt.), representing SCAQMD  
Jack Kitowski, representing California Air Resources Board  
Michele Martinez, representing SCAG  
Steve Veres, representing LA County MTA  
Greg Winterbottom, representing OCTA

**MSRC-TAC MEMBERS PRESENT:**

Rongsheng Luo, representing Southern California Association of Governments  
Dean Saito, representing SCAQMD

**OTHERS PRESENT:**

Debra Ashby, SCAQMD  
David Czamanske, SCAQMD Board Assistant (Cacciotti)  
Ric Teano, OCTA  
Rainbow Yeung, SCAQMD

**SCAQMD STAFF & CONTRACTORS**

Leah Alfaro, MSRC Contracts Assistant  
Angelica Enriquez, SCAQMD Staff  
Ray Gorski, MSRC Technical Advisor-Contractor  
John Kampa, Financial Analyst  
Christina Kusnandar, Contracts Assistant  
Matt MacKenzie, MSRC Contracts Assistant  
Ana Ponce, MSRC Administrative Liaison  
Cynthia Ravenstein, MSRC Contracts Administrator  
Veera Tyagi, Senior Deputy District Counsel

**CALL TO ORDER**

- Call to Order
- MSRC Chair Greg Pettis called the meeting to order at 2:04 p.m. Roll call was taken at the start of the meeting. The following members and alternates were present: CARTER, ROYBAL SALTARELLI, YAMARONE, MCCALLON, PETTIS.

Cynthia Ravenstein, MSRC Contracts Administrator, introduced Leah Alfaro, the new MSRC Contracts Assistant. This is Ms. Alfaro's third week on the MSRC staff team.

- Opening Comments

There were no opening comments.

**STATUS REPORT**

Copies of the Clean Transportation Policy Update were distributed at the meeting. MSRC Chair Greg Pettis asked the Members to read the Update at their convenience.

[MSRC Alternate Tim Shaw arrived at 2:05 p.m.]

**CONSENT CALENDAR (Items 1 through 5)**  
**Receive and Approve Items**

Cynthia Ravenstein, MSRC Contracts Administrator, indicated that the City of Palm Desert has withdrawn their request for a contract modification, so there will be no Agenda Item #6.

MSRC Alternate Tim Shaw noted for the record that, for Agenda Item #2, he does not have a financial interest, but he is required to identify that he is a member of the Board of Directors for Orange County Transportation Authority (OCTA), which is involved in this item.

**Agenda Item #1 – Minutes of the November 17 and December 15, 2016 MSRC Meetings**

The minutes of the November 17 and December 15, 2016 MSRC meetings were included in the agenda package.

ON MOTION BY MSRC VICE CHAIR LARRY MCCALLON, AND  
SECONDED BY MSRC CHAIR GREG PETTIS, UNDER APPROVAL OF  
CONSENT CALENDAR ITEMS #1 THROUGH #5, THE MSRC  
UNANIMOUSLY APPROVED THE NOVEMBER 17 AND DECEMBER 15,  
2016 MEETING MINUTES.

AYES: CARTER, ROYBAL SALTARELLI, YAMARONE, SHAW,  
MCCALLON, PETTIS.

NOES: NONE.

**ACTION:** Staff will include the November 17 and December 15, 2016 minutes in the MSRC Committee Report for the March 3, 2017 SCAQMD Board meeting, and place a copy on the MSRC's website.

**Agenda Item #2 – Summary of Final Reports by MSRC Contractors**

The MSRC received and unanimously approved four final report summaries this month, as follows:

1. City of Pasadena, Contract #MS12080, which provided \$225,000 for the expansion of existing CNG infrastructure;
2. Anaheim Transportation Network, Contract #MS14073, which provided \$221,312 for Anaheim Resort Circulator Service;
3. County Sanitation Districts of Los Angeles County, Contract #MS14077, which provided \$175,000 to construct a new limited-access CNG station; and
4. Orange County Transportation Authority, Contract #MS16095, which provided \$694,645 to implement express bus service to Orange County Fair.

ON MOTION BY MSRC VICE CHAIR LARRY MCCALLON, AND  
SECONDED BY MSRC CHAIR GREG PETTIS, UNDER APPROVAL OF  
CONSENT CALENDAR ITEMS #1 THROUGH #5, THE MSRC  
UNANIMOUSLY APPROVED THE FINAL REPORTS LISTED ABOVE.  
AYES: CARTER, ROYBAL SALTARELLI, YAMARONE, SHAW,  
MCCALLON, PETTIS.  
NOES: NONE.

ACTION: MSRC staff will file the final reports and release any retention on the contracts.

**Receive and File Items****Agenda Item #3 – MSRC Contracts Administrator's Report**

The MSRC AB 2766 Contracts Administrator's Report for December 1, 2016 through January 25, 2017 was included in the agenda package.

ON MOTION BY MSRC VICE CHAIR LARRY MCCALLON, AND  
SECONDED BY MSRC CHAIR GREG PETTIS, UNDER APPROVAL OF  
CONSENT CALENDAR ITEMS #1 THROUGH #5, THE MSRC  
UNANIMOUSLY VOTED TO RECEIVE AND FILE THE CONTRACTS  
ADMINISTRATOR'S REPORT FOR DECEMBER 1, 2016 THROUGH  
JANUARY 25, 2017.  
AYES: CARTER, ROYBAL SALTARELLI, YAMARONE, SHAW,  
MCCALLON, PETTIS.  
NOES: NONE.

ACTION: Staff will include the MSRC Contracts Administrator's Report in the MSRC Committee Report for the March 3, 2017 SCAQMD Board meeting.

**Agenda Item #4 – Financial Report on AB 2766 Discretionary Fund**

A financial report on the AB 2766 Discretionary Fund for the period ending January 31, 2017 was included in the agenda package.

ON MOTION BY MSRC VICE CHAIR LARRY MCCALLON, AND  
SECONDED BY MSRC CHAIR GREG PETTIS, UNDER APPROVAL OF  
CONSENT CALENDAR ITEMS #1 THROUGH #5, THE MSRC  
UNANIMOUSLY VOTED TO RECEIVE AND FILE THE FINANCIAL  
REPORT FOR THE PERIOD ENDING JANUARY 31, 2017.

AYES: CARTER, ROYBAL SALTARELLI, YAMARONE, SHAW,  
MCCALLON, PETTIS.

NOES: NONE.

**ACTION:** No further action is required.

**For Approval – As Recommended**

**Agenda Item #5 – Consider Reduced Scope and Value and One-Year Extension by City of Bellflower, Contract #ML12051 (\$170,000 – Install Eight Level II EV Charging Stations)**

The City indicates a preference for installing two Level III/DC Fast Charger stations, rather than the eight Level II stations specified in the contract, based on the City's belief that the fast chargers will be more popular and experience a greater turnover. They are requesting approval to substitute the fast chargers, coupled with a corresponding contract value reduction from \$170,000 to \$100,000. The City further requests a one-year term extension in order to complete the work. The MSRC-TAC reviewed this request and unanimously recommended approval.

ON MOTION BY MSRC VICE CHAIR LARRY MCCALLON, AND  
SECONDED BY MSRC CHAIR GREG PETTIS, UNDER APPROVAL OF  
CONSENT CALENDAR ITEMS #1 THROUGH #5, THE MSRC  
UNANIMOUSLY VOTED TO APPROVE THE CITY OF BELLFLOWER'S  
SUBSTITUTION OF THE INSTALLATION OF TWO LEVEL III/DC FAST  
CHARGER STATIONS; A CORRESPONDING CONTRACT VALUE  
REDUCTION FROM \$170,000 TO \$100,000; AND A ONE-YEAR TERM  
EXTENSION, AS PART OF THE FY 2011-12 LOCAL GOVERNMENT  
MATCH PROGRAM.

AYES: CARTER, ROYBAL SALTARELLI, YAMARONE, SHAW,  
MCCALLON, PETTIS.

NOES: NONE.

**Agenda Item #6 – Consider Modified Scope and Six-Month Term Extension by City of Palm Desert, Contract #ML16072 (\$56,000 – Install EV Fast-Charging Station)**

This item was withdrawn by City of Palm Desert.

**ACTION CALENDAR (Items 7 through 9)**

**FYs 2014-16 WORK PROGRAM**

**Agenda Item #7 – Consider Application Received under the Near-Zero Heavy-Duty Natural Gas Engine Incentive Program**

Ray Gorski, MSRC Technical Advisor, reported on this item. As an element of the FYs 2014-16 Work Program, the MSRC allocated \$10 million to incentivize the purchase of near zero natural gas engines for applications in both transit buses and refuse collection vehicles. This Program opened on June 3, 2016, and it closed on January 6, 2017. One additional application has been received from Long Beach Transit. They are requesting \$600,000 to purchase 40 new transit

buses which are equipped with the qualifying Cummins Westport ISL G Near Zero engine certified at 0.02 g/bhp-hr. This has gone through both the Heavy Duty Subcommittee as well as the MSRC-TAC and they recommend approval.

ON MOTION BY MSRC VICE CHAIR LARRY MCCALLON, AND  
SECONDED BY MSRC ALTERNATE TIM SHAW, THE MSRC  
UNANIMOUSLY VOTED TO APPROVE AN AWARD OF \$600,000 TO  
LONG BEACH TRANSIT TOWARD THE PURCHASE OF 40 NEW  
TRANSIT BUSES EQUIPPED WITH ISL G NEAR ZERO ENGINE.  
AYES: CARTER, ROYBAL SALTARELLI, YAMARONE, SHAW,  
MCCALLON, PETTIS.  
NOES: NONE.

**ACTION:** This award will be considered by the SCAQMD Board at its March 3, 2017 meeting.

**Agenda Item #8 – Receive Update on Implementation of Enhanced Fleet Modernization Program (EFMP) and Consider Potential Reduction of MSRC Allocation**

MSRC-TAC Member Dean Saito reported on this item. This item is to update the MSRC on the EFMP Program. By means of background, this is a Program to target low income households and offer them a voucher to replace their older vehicle with an advanced technology vehicle, either a conventional hybrid, a plug-in hybrid, or a battery-electric. They get added revenues if they live in a disadvantaged community. To date, the current Program has approved over 1,300 vouchers. Ninety-four percent of the applications have been from consumers living in disadvantaged communities. A majority of the vehicles have either been hybrid, plug-in hybrid, or battery-electric. In November of 2014 the MSRC approved \$800,000 to assist in the EFMP Program, and in September 2015, the MSRC approved up to \$6.2 million additional. The vouchers expended to date have been \$1.867 million, for a total of 320 vouchers. We have received funding from the state under AB 118 for \$3.14 million and from the GHG Reduction Fund up to \$12.75 million. We are planning to continue the EFMP Implementation; we are enhancing the website to streamline the application procedures to handle more applications; we have received additional GHG Reduction Funds for this Program recently and we are reviewing a draft Interagency Agreement to reflect that. The total remaining MSRC funds that have not been committed to date is \$4.651 million. SCAQMD staff is proposing the continued implementation and expenditure of MSRC funds for a total of \$651,000 and to return to the MSRC General Fund, at the discretion of the MSRC, a total of \$4 million.

MSRC Vice Chair Larry McCallon asked about the return on investment. How much are we taking out in terms of pollution? Mr. Saito replied that for the most part, when we evaluated the emissions testing of all the vehicles, they are older vehicles and a majority of them would not have passed Smog Check, so we are getting a lot of criteria pollutant reductions, but a main target of this Program is GHG reductions. Therefore, for the expenditures we are achieving significant GHG reductions that are being reported to CARB. There is a chart in today's presentation that describes the percentage of battery-electric and plug-in hybrids. A majority of the vehicles, as replacement vehicles, are these advanced technology vehicles, they clearly are cleaner than the gasoline combustion vehicles. Mr. McCallon asked if we are spending a lot of money and getting a little bit in return. Mr. Saito said that compared to other programs, that may be true, but on the flip side of that, typically our programs have targeted criteria pollutants and this is a Program that combines a GHG component along with the criteria pollutants. It's kind of a blending of the two different programs that the AQMP is targeting. MSRC Alternate Michael Carter added that the Program also incentivizes the use of advanced technologies; that's the other part of it. Emissions aside, it helps advance hybrids and plug-ins. Mr. Saito confirmed that it is a Program targeting

low-income households. MSRC Chair Greg Pettis clarified that in this particular case the MSRC is just moving money from this Program back into the General Fund. MSRC Alternate Tim Shaw asked what the balance will be after the \$4 million is returned. John Kampa, Financial Analyst, indicated that the balance would then be about \$44 million unallocated fund balance for FYs 2016-18 Work Program. Mr. Carter indicated that there is enough funding available for the EFMP Program to continue with AB 118 funds, so it is not like we are cutting it short. Mr. Saito added that because of the recent legislature allocation of the Plus-Up Funds, staff felt comfortable returning the money back to the MSRC General Fund.

ON MOTION BY MSRC VICE CHAIR LARRY MCCALLON, AND  
SECONDED BY MSRC ALTERNATE TIM SHAW, THE MSRC  
UNANIMOUSLY VOTED TO APPROVE THE REPROGRAMMING OF  
\$4 MILLION FROM EFMP TO THE MSRC'S 2016-18 WORK PROGRAM,  
LEAVING A BALANCE OF \$651,000 ALLOCATED TO EFMP.  
AYES: CARTER, ROYBAL SALTARELLI, YAMARONE, SHAW,  
MCCALLON, PETTIS.  
NOES: NONE.

**ACTION:** This item will be considered by the SCAQMD Board at its March 3, 2017 meeting.

#### **FYs 2016-18 WORK PROGRAM**

##### **Agenda Item #9 – Consider Approval of Program Announcement for Major Event Center Transportation Program**

Ray Gorski, MSRC Technical Advisor, reported on this item. The agenda package includes a draft solicitation document for the Major Event Center Transportation Program. A Subcommittee was formed that included members of the MSRC-TAC, as well as Greg Winterbottom, representing the MSRC, and they went through line-by-line through the prior Work Program's document looking for areas where improvements could be made. The emphasis was to improve the air quality benefits which result from the Program. In many cases, we were trying to tighten up the requirements as well as the evaluation criteria, incorporating lessons learned from prior years that the Program was implemented. There is a recommendation to increase the targeted funding level from \$4.5 million up to an even \$5 million, based upon lessons learned. It is impossible to accurately predict, but the MSRC-TAC believes that \$5 million should be adequate without needing to come back to the MSRC seeking additional moneys. To keep the program implementation within the basic years that the Work Program is funding, trying to avoid funding projects that occur well out in the future with this year's money, the MSRC-TAC is recommending that projects be implemented no later than December 31, 2019. That gives approximately two consecutive years of events that could be proposed. The MSRC-TAC is further recommending that the MSRC limit a proposal to a maximum of two consecutive years. The MSRC-TAC recommends holding the EPA 2010 and CARB 2010 standards for the vehicles, however, they do want to incentivize to the extent feasible the implementation of projects utilizing Near Zero and Zero technologies. Setting a standard 90 percent lower than the 2010 standard doesn't seem practical today, so instead the MSRC-TAC is recommending to sweeten the pot and give an additional incentive for those entities which do propose and obligate themselves to use Zero emission or Near Zero emission technologies. Relative to locomotives, it's understood that Metrolink is in a transition phase right now. They have Tier 4 locomotives which are coming online, but they are not here quite as soon as had hoped. The MSRC-TAC is recommending that Tier 4 locomotives be required for all events beginning no later than

January 1, 2018. That gives a few months of phase-in for those Tier 4 locomotives. If those locomotives become available prior to January 1, 2018, then the contract would require that they be utilized. Then, after January 1, 2018, all locomotive projects would need to utilize Tier 4 technologies.

As far as the co-funding, the basic co-funding requirement, in and of itself, has not changed. The Major Events Center projects would require a dollar-for-dollar match from the project proponents. However, it has been recommended that if projects do offer to use Zero or Near Zero emission technologies, that they get a break on their co-funding obligation and that the required amount be only 25 percent of the total project cost. This is an incentive to utilize the cleanest vehicles available. If a fleet has a mixed fleet, for example, they are just starting to receive deliveries of their new Near Zero vehicles, the required co-funding would be pro-rated.

As far as the definition of a Major Event Center, it has been recommended that it be tightened up. Past solicitations have said that the occupancy capacity had to be at least 5,000 people with an average attendance of 2,000 people. Looking at the past history, it was decided that the thresholds would probably need to be increased. The MSRC-TAC is recommending a 15,000 person capacity for the center itself, and then having approximately 50 percent patron utilization for the average event. The hope is that by attracting the large centers, the MSRC can get a meaningful fraction of those participants such that you can justify implementing a circulator service. What we have found in a couple of smaller projects is that we have a lot of vehicles driving around, but they are not at capacity. Because of that, there are a lot of emissions generated from those vehicles which are driving around. MSRC Vice Chair Larry McCallon interjected that by changing it to those limits you have completely eliminated anything from San Bernardino County, and he objected to that. Mr. Gorski indicated that the goal is to maximize the air quality benefits which we get, that's all. If there is a number that the MSRC has, the TAC or the MSRC staff will incorporate it. Mr. McCallon indicated that there is nothing in San Bernardino County, that he is aware of, that can meet those capacity numbers. Mr. Gorski commented that right now San Bernardino has the Auto Club Speedway as its major venue. Mr. McCallon added that they have the Orange Show and Citizens Business Bank Arena events. Mr. Gorski indicated that that is why we are presenting this. We are trying to understand what the preference of the MSRC is relative to setting the threshold. Mr. McCallon's recommendation would be to raise the minimum capacity to no more than 7,500 and the average event attendance to 5,000, assuming the rest of the MSRC agrees. Mr. McCallon stated that they have been reaching out to some of these other places to see if they can generate some interest. That's why he doesn't want to raise the limit that high because then we are limiting it totally to one event, the Auto Club Speedway, in San Bernardino.

As far as the actual Program schedule, the MSRC-TAC is suggesting a one-year application period which would commence on March 3, 2017 and close a year later on March 30, 2018. Relative to the evaluation criteria, the recommendation is to adopt a more strict evaluation protocol. The highest score criterion is the quantifiable air quality benefits. In the draft solicitation, there are a whole bunch of criteria under that item which are what will be utilized to judge whether or not a project has the potential to achieve substantial air quality benefits or improvement in emission reductions. This is worth 75 points.

The Additional Project Co-Funding is a scale to show some recognition of entities which are bringing greater co-funding than what is required by the actual Program requirements. It has always been the desire of the MSRC, in past programs, to have these projects become self-sustaining after the initial demonstration period. The Program Continuation Plan is to recognize that for projects that can show a continuation plan beyond the MSRC funding period, to give them additional consideration. The crux here, though, is that the way it is currently drafted, a

project would have to achieve a minimum of 60 points to be further considered. If something can't score at the 60 percentile, it would not be deemed worthy of MSRC consideration and it would be bounded out. That is the recommendation for the scoring criteria.

MSRC Alternate Michael Carter asked what the justification was for the 15,000 number. Mr. Gorski said that looking at Major Event Centers throughout the area, and what their average attendance was; what types of programs were held there, sporting events, concerts, etc.; and it appeared that around 15,000 was a break point for the "major," and that's how we came up with that number. There are a lot of "pop-up" events, and this was discussed at the TAC, that the MSRC can also entertain. For example, if there is going to be an event held in a geographic location, which is projected to have a very high occupancy, the MSRC would certainly want to at least look into that type of project. It was just doing a survey of what's out there, what did we deem to be a "major" event center, one that would generate a lot of traffic, a lot of congestion, was poorly transit served, and would benefit from having other transportation services applied to it.

MSRC Alternate Tim Shaw asked about the Great Park in Irvine. He knows they have big events; the Solar Decathlon being one of them. Would that be something the MSRC would consider? Mr. Gorski replied that that is an example of the MSRC looking at a project on, not so much a physical structure, but as a geographic area as being a venue, and the Great Park in Orange County did receive MSRC money to do the Solar Decathlon with the U.S. Department of Energy.

MSRC-TAC Member Dean Saito asked if the definition for Near Zero is 0.02 g/bhp-hr, or is it any of the optional NOx standards. Mr. Gorski replied that right now, the way it is delineated in the draft announcement, it is 0.02 g/bhp-hr.

ON MOTION BY MSRC VICE CHAIR LARRY MCCALLON, AND  
SECONDED BY MSRC ALTERNATE TIM SHAW, THE MSRC  
UNANIMOUSLY VOTED TO APPROVE THE PROGRAM  
ANNOUNCEMENT FOR THE MAJOR EVENT CENTER  
TRANSPORTATION PROGRAM, WITH A MODIFICATION TO THE  
OCCUPANCY CAPACITY TO AT LEAST 7,500 PEOPLE; AND AVERAGE  
EVENT ATTENDANCE TO AT LEAST 5,000 PEOPLE; IN ADDITION TO A  
TARGETED FUNDING AMOUNT OF \$5 MILLION.  
AYES: CARTER, ROYBAL SALTARELLI, YAMARONE, SHAW,  
MCCALLON, PETTIS.  
NOES: NONE.

## **OTHER BUSINESS**

### **Agenda Item #10 – Other Business**

No other business was introduced.

## **PUBLIC COMMENT PERIOD**

- Public comments were allowed during the discussion of each agenda item. No comments were made on non-agenda items.



**ADJOURNMENT**

THERE BEING NO FURTHER BUSINESS, THE MSRC MEETING  
ADJOURNED AT 2:29 P.M.

**NEXT MEETING**

Thursday, March 16, 2017, at 2 p.m., Room CC-8.

[Prepared by Ana Ponce]



**MOBILE SOURCE AIR POLLUTION REDUCTION REVIEW COMMITTEE  
THURSDAY, MARCH 16, 2017 MEETING MINUTES**

21865 Copley Drive, Diamond, Bar, CA 91765- Conference Room CC-8

**MEMBERS PRESENT:**

Ben Benoit (Alt.), representing SCAQMD  
Michael Carter (Alt.), representing California Air Resources Board  
Adam Rush (Alt.), representing RCTC  
Greg Winterbottom, representing OCTA  
Mark Yamarone (Alt.), representing Los Angeles County MTA (via v/c)

**MEMBERS ABSENT:**

(Chair) Greg Pettis, representing RCTC  
(Vice Chair) Larry McCallon, representing SBCTA  
Jack Kitowski, representing California Air Resources Board  
Michele Martinez, representing SCAG  
Dolores Roybal Saltarelli, representing Regional Rideshare Agency  
Steve Veres, representing LA County MTA

**MSRC-TAC MEMBERS PRESENT:**

Rongsheng Luo, representing SCAG  
Kelly Lynn, representing SBCTA

**OTHERS PRESENT:**

Ric Teano, OCTA

**SCAQMD STAFF & CONTRACTORS**

Leah Alfaro, MSRC Contracts Assistant  
Penny Shaw Cedillo, SCAQMD Staff  
Ray Gorski, MSRC Technical Advisor-Contractor  
Henry Hogo, Asst. DEO/Science & Technology Advancement  
John Kampa, Financial Analyst  
Christina Kusnandar, Contracts Assistant  
Matt MacKenzie, MSRC Contracts Assistant  
Fred Minassian, Asst. DEO/Science & Technology Advancement  
Matt Miyasato, DEO/Science & Technology Advancement  
Ana Ponce, MSRC Administrative Liaison  
Cynthia Ravenstein, MSRC Contracts Administrator  
Veera Tyagi, Senior Deputy District Counsel  
Vicki White, Technology Implementation Manager  
Paul Wright, Audio Visual Specialist

**CALL TO ORDER**

- Call to Order
- MSRC Member Greg Winterbottom chaired the meeting in the absence of MSRC Chair Greg Pettis and MSRC Vice Chair Larry McCallon. Mr. Winterbottom called the meeting to order at 2:02 p.m. The following members and alternates were present: BENOIT, CARTER, YAMARONE, WINTERBOTTOM, RUSH.
- Opening Comments

There were no opening comments.

**STATUS REPORT**

Copies of the Clean Transportation Policy Update were distributed at the meeting.

**CONSENT CALENDAR (Items 1 through 7)****Receive and Approve Items**

MSRC Member Greg Winterbottom stated for the record that he does not have any financial interest in Item #2 and Item #8, but he disclosed that he is a member of the OCTA Board of Directors, which is involved in these items.

MSRC Member Ben Benoit and MSRC Alternate Adam Rush stated that they do not have any financial interest in Item #7, but disclosed for the record that they are on the Board of Directors for Riverside County Transportation Commission, which is involved in this item.

MSRC Alternate Mark Yamarone stated that he does not have any financial interest in Item #6, but disclosed for the record that he is employed by L.A. County Metropolitan Transportation Authority, which is involved in this item.

**Agenda Item #1 – Minutes of the September 15, 2016, January 25 and February 16, 2017 MSRC Meetings**

The minutes of the January 25 Special MSRC meeting were included in the agenda package. The minutes of the September 15, 2016 MSRC meeting were distributed at the meeting. The minutes of the February 16, 2017 meeting were not yet available.

ON MOTION BY MSRC MEMBER BEN BENOIT, AND SECONDED BY MSRC ALTERNATE ADAM RUSH, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #7, THE MSRC UNANIMOUSLY APPROVED THE SEPTEMBER 15, 2016 AND JANUARY 25, 2017 MSRC MEETING MINUTES.

**ACTION:** Staff will include the September 15, 2016 and January 25, 2017 MSRC meeting minutes in the MSRC Committee Report for the April 7, 2017 SCAQMD Board meeting, and will place a copy on the MSRC's website.

**Agenda Item #2 – Summary of Final Reports by MSRC Contractors**

The MSRC received and unanimously approved two final report summaries this month, as follows: 1) Clean Energy, Contract #MS08058, which provided \$400,000 to construct a new CNG station at Ontario Airport; and 2) Orange County Transportation Authority, Contract #MS16089, which provided \$128,500 to implement Express Bus Service to Angel Stadium.

ON MOTION BY MSRC MEMBER BEN BENOIT, AND SECONDED BY MSRC ALTERNATE ADAM RUSH, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #7, THE MSRC UNANIMOUSLY APPROVED THE FINAL REPORTS LISTED ABOVE.

**ACTION:** MSRC staff will file the final reports and release any retention on the contracts.

**Receive and File Items****Agenda Item #3 – MSRC Contracts Administrator's Report**

The MSRC AB 2766 Contracts Administrator's Report for January 26 through February 27, 2017 was included in the agenda package.

ON MOTION BY MSRC MEMBER BEN BENOIT, AND SECONDED BY MSRC ALTERNATE ADAM RUSH, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #7, THE MSRC UNANIMOUSLY VOTED TO RECEIVE AND FILE THE CONTRACTS ADMINISTRATOR'S REPORT FOR JANUARY 26 THROUGH FEBRUARY 27, 2017.

**ACTION:** Staff will include the MSRC Contracts Administrator's Report in the MSRC Committee Report for the April 7, 2017 SCAQMD Board meeting.

**Agenda Item #4 – Financial Report on AB 2766 Discretionary Fund**

A financial report on the AB 2766 Discretionary Fund for the period ending February 28, 2017 was included in the agenda package.

ON MOTION BY MSRC MEMBER BEN BENOIT, AND SECONDED BY MSRC ALTERNATE ADAM RUSH, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #7, THE MSRC UNANIMOUSLY VOTED TO RECEIVE AND FILE THE FINANCIAL REPORT FOR THE PERIOD ENDING FEBRUARY 28, 2017.

**ACTION:** No further action is required.

**For Approval – As Recommended****Agenda Item #5 – Consider Two-Year Term Extension and Alternative Remedy by City of Los Angeles, Bureau of Sanitation, Contract #MS12082 (Install CNG Station)**

The City indicates that unanticipated delays in the procurement and delivery of collection vehicles, coupled with a delay in the retrofit of the yard's maintenance facility, have combined to retard the deployment of vehicles using the subject station. They do not anticipate that the station

will dispense the required throughput in the third year of operation, and possibly not the fourth year. As an alternative remedy, the City requests a two-year contract term extension, with the throughput requirement being met in the fifth through seventh years of operation. The MSRC-TAC unanimously recommended approval.

ON MOTION BY MSRC MEMBER BEN BENOIT, AND SECONDED BY MSRC ALTERNATE ADAM RUSH, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #7, THE MSRC UNANIMOUSLY VOTED TO APPROVE FOR THE CITY OF LOS ANGELES, BUREAU OF SANITATION CONTRACT #MS12082, A TWO-YEAR CONTRACT TERM EXTENSION, WITH THE THROUGHPUT REQUIREMENT BEING MET IN THE FIFTH THROUGH SEVENTH YEARS OF OPERATION.

**ACTION:** MSRC Staff will amend the above contract accordingly.

**Agenda Item #6 – Modify Award to Los Angeles Metropolitan Transportation Authority (Metro) under the Major Event Center Transportation Program to Include Two Concerts at Dodger Stadium**

In June 2016, the MSRC awarded Metro \$807,945 to provide special transit service for the 2017 Dodgers baseball season. Metro has recently brought to attention that their proposal, and the \$807,945 funding request, included service to two concerts at Dodger Stadium. This aspect of the service was not described to the MSRC or SCAQMD Governing Board. Metro requests modification of the award to include the concert service, with no change to the award amount. The MSRC-TAC unanimously recommended approval.

ON MOTION BY MSRC MEMBER BEN BENOIT, AND SECONDED BY MSRC ALTERNATE ADAM RUSH, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #7, THE MSRC UNANIMOUSLY VOTED TO APPROVE AN AWARD MODIFICATION FOR THE LOS ANGELES METROPOLITAN TRANSPORTATION AUTHORITY TO INCLUDE SPECIAL TRANSIT SERVICE TO TWO CONCERTS AT DODGER STADIUM, IN ADDITION TO HOME BASEBALL GAMES, WITH NO CHANGE TO THE AWARD AMOUNT OF \$807,945.

**ACTION:** This contract modification will be considered by the SCAQMD Board at its meeting on April 7, 2017.

**Agenda Item #7 – Consider Reallocation of Costs Between Tasks by Riverside County Transportation Commission (RCTC), Contract #MS14059 (Implement Signal Synchronization Projects)**

RCTC requests to reallocate \$74,625 from the Hamner Avenue Project in Eastvale to the Magnolia Avenue Project in Riverside. There would be no change in the overall MSRC contribution or the work to be performed. The MSRC-TAC unanimously recommended approval, with one abstention.

ON MOTION BY MSRC MEMBER BEN BENOIT, AND SECONDED BY MSRC ALTERNATE ADAM RUSH, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #7, THE MSRC UNANIMOUSLY VOTED TO APPROVE FOR THE RIVERSIDE COUNTY TRANSPORTATION COMMISSION CONTRACT #MS14059, REALLOCATION OF \$74,625 FROM THE HAMNER AVENUE PROJECT IN EASTVALE TO THE MAGNOLIA AVENUE PROJECT IN RIVERSIDE, WITH NO CHANGE IN THE OVERALL MSRC CONTRIBUTION OR THE WORK TO BE PERFORMED.

**ACTION:** MSRC Staff will amend the above contract accordingly.

**ACTION CALENDAR (Item 8)**

**FYs 2016-18 WORK PROGRAM**

**Agenda Item #8 – Consider Application Received under the Major Event Center Transportation Program**

MSRC-TAC Member Kelly Lynn, Chair/TCM Subcommittee reported that an application was received from OCTA under the Major Event Center Transportation Program. The TCM Subcommittee met earlier in the day to discuss the proposal, and it was unanimously supported. As the MSRC may recall, when the TCM Subcommittee was asked to review overall the Major Event Center category, one of the things that was newly put into place was a new proposal score sheet with categories. From now on, going forward, we look at items as far as whether they are approved or not by the Subcommittee looking at criteria that have the 1) Potential to Achieve Quantifiable Air Pollutant Reductions; 2) Additional Project Co-Funding; and 3) Program Continuation Plan. Today was the Subcommittee's first opportunity to use those criteria.

The OCTA proposal is for Metrolink service, their Angels Express Service, to the Angels Stadium. It is for the 2017-2018 seasons and it is for all the regular weekday home games which they estimate to be 54 games for each season. There is some urgency to this item. The MSRC-TAC did not review this item. It was reviewed by the TCM Subcommittee and brought to the MSRC today because their first game is March 30, 2017. They are proposing a special train service, one on the Orange line that goes from Laguna Niguel/Mission Viejo area up to the Angels Stadium in Anaheim and one coming down from Union Station, so there is a northbound and southbound, and then there is a reverse commute.

The other service OCTA is proposing is for the Inland Empire. That would be for 15 Friday night games, with one exception on a Thursday night, April 27.

The total project cost is \$1,007,272, but they are asking from the MSRC \$503,272. A minimum of 60 points are required to pass the TCM Subcommittee, and they had an overall score of 75 points. Therefore, the TCM Subcommittee is recommending approval.

MSRC Member Greg Winterbottom stated that this is a great program. They will be using Tier 4 locomotives, as soon as they become available, possibly by the end of March.

ON MOTION BY MSRC MEMBER BEN BENOIT, AND SECONDED BY MSRC ALTERNATE ADAM RUSH, THE MSRC UNANIMOUSLY VOTED TO APPROVE AN AWARD OF \$503,272 TO ORANGE COUNTY TRANSPORTATION AUTHORITY TO CO-FUND THE OCTA ANGELS EXPRESS METROLINK SERVICE TO ANGELS STADIUM.

AYES: BENOIT, CARTER, YAMARONE, WINTERBOTTOM, RUSH  
NOES: NONE.

**ACTION:** This award will be considered by the SCAQMD Board at its April 7, 2017 meeting.

### **OTHER BUSINESS**

#### **Agenda Item #9 – Other Business**

Ray Gorski, MSRC Technical Advisor, recognized Henry Hogo, the SCAQMD Liaison to the MSRC. He will be retiring at the end of March. Speaking on behalf of the MSRC staff, Mr. Gorski would like the MSRC membership to know that part of the reason that things go as smoothly as they do is because of Mr. Hogo. He has been the liaison; he has kept an eye on the day-to-day administration; and he has always had an open-door policy. Ray Gorski appreciates his wisdom, experience and knowledge. Mr. Hogo has always tried to make sure that the SCAQMD and the MSRC are working as smoothly as we can towards common objectives. Nothing is going to change when Mr. Hogo leaves because Mr. Fred Minassian, Assistant DEO/Science and Technology Advancement, is going to be taking over in that capacity.

Mr. Winterbottom added that he has been on the MSRC for over 22 years and they have not always been easy and smooth, and he appreciates the help that Mr. Hogo has given the MSRC. He thanked Mr. Hogo for his service.

Henry Hogo, Assistant DEO/Science and Technology Advancement, indicated that Matt Miyasato, DEO/Science & Technology Advancement, is present at today's meeting, and he thanked Dr. Miyasato for the guidance and support he has provided to Ray Gorski and him. He also announced that Connie Day, the MSRC-TAC Alternate representing SCAQMD, retired on March 10, and that Vicki White, Technology Implementation Manager, will be taking Ms. Day's place. Ultimately MSRC-TAC Member Dean Saito will be retiring later on this year. Mr. Hogo thanked the MSRC.

MSRC Alternate Michael Carter stated that, on behalf of the Air Resources Board, it has been a pleasure working with Mr. Hogo. He will be missed personally and professionally. He indicated that anything he has ever dealt with with Mr. Hogo, concerning ARB, has always been a real cooperative joint effort and he wished Mr. Hogo good luck.

### **PUBLIC COMMENT PERIOD**

- Public comments were allowed during the discussion of each agenda item. No comments were made on non-agenda items.

### **ADJOURNMENT**

THERE BEING NO FURTHER BUSINESS, THE MSRC MEETING  
ADJOURNED AT 2:15 P.M.

### **NEXT MEETING**

Thursday, April 20, 2017, at 2 p.m., Room CC-8.



### MSRC Agenda Item No. 3

**DATE:** May 18, 2017

**FROM:** Cynthia Ravenstein

**SUBJECT:** AB 2766 Contracts Administrator's Report

**SYNOPSIS:** This report covers key issues addressed by MSRC staff, status of open contracts, and administrative scope changes from February 23 to May 10, 2017.

**RECOMMENDATION:** Receive and file report

**WORK PROGRAM IMPACT:** None

### **Contract Execution Status**

#### **2016-18 Work Program**

On July 8, 2016, the SCAQMD Governing Board approved an award under the Event Center Transportation Program. This contract is with the prospective contractor for signature.

On October 7, 2016, the SCAQMD Governing Board approved three awards under the Event Center Transportation Program and one award for a Regional Active Transportation Partnership Program. These contracts are with the prospective contractor for signature, with the SCAQMD Board Chair for signature, or executed.

On January 6, 2017, the SCAQMD Governing Board approved an award for development, hosting and maintenance of a new MSRC website. This contract is executed.

On April 7, 2017, the SCAQMD Governing Board approved an award under the Event Center Transportation Program. This contract is undergoing internal review.

#### **2014-16 Work Program**

On December 5, 2014, the SCAQMD Governing Board approved an award under the AB118 Enhanced Fleet Maintenance Program. This contract is executed.

On June 5, 2015, the SCAQMD Governing Board approved two awards under the Event Center Transportation Program and one award to provide low-emission transportation services to the Special Olympics World Games. These contracts are executed.



On September 4, 2015, the SCAQMD Governing Board approved 25 awards under the Local Government Match Program and one award under the Transportation Control Measure Partnership Program. These contracts are with the prospective contractor for signature or executed.

On October 2, 2015, the SCAQMD Governing Board approved 11 awards under the Local Government Match Program and one award under the Alternative Fuel Infrastructure Program. These contracts are executed.

On November 6, 2015, the SCAQMD Governing Board approved 37 awards under the Local Government Match Program. These contracts are under development, with the prospective contractor for signature or executed.

On December 4, 2015, the SCAQMD Governing Board approved one award under the Major Event Center Transportation Program, one award under the Alternative Fuel Infrastructure Program, and one award under the Transportation Control Measure Partnership Program. These contracts are executed.

On January 8, 2016, the SCAQMD Governing Board approved two awards under the Major Event Center Transportation Program, one award under the Local Government Match Program, and one award under the Transportation Control Measure Partnership Program. These contracts are executed.

On March 4, 2016, the SCAQMD Governing Board approved two awards under the Alternative Fuel Infrastructure Program. These contracts are with the SCAQMD Board Chair for signature or executed.

On April 1, 2016, the SCAQMD Governing Board approved one award under the Major Event Center Transportation Program and five awards under the Transportation Control Measure Partnership Program. These contracts are executed.

On May 6, 2016, the SCAQMD Governing Board approved one award under the Major Event Center Transportation Program and one award under the Transportation Control Measure Partnership Program. These contracts are executed.

On June 3, 2016, the SCAQMD Governing Board approved one award under the Alternative Fuel Infrastructure Program. This contract is executed.

On October 7, 2016, the SCAQMD Governing Board approved ten awards under the Alternative Fuel Infrastructure Program and five awards under the Near-Zero Natural Gas Engine Incentives Program. These contracts are under development, with the prospective contractor for signature, or executed.

On January 6, 2017, the SCAQMD Governing Board approved an award under the Alternative Fuel Infrastructure Program and an award under the Near-Zero Natural Gas Engine Incentives Program. These contracts are with the SCAQMD Board Chair for signature or executed.

### **2012-14 Work Program**

Except as specifically discussed below, all contracts from this Work Program are executed.

#### **Work Program Status**

Contract Status Reports for work program years with open (including “Open/Complete”) and/or pending contracts are attached. MSRC or MSRC-TAC members may request spreadsheets covering any other work program year.

#### ***FY 2004-05 Work Program Contracts***

One contract from this work program year is open.

#### ***FY 2004-05 Invoices Paid***

No invoices were paid during this period.

#### ***FY 2006-07 Work Program Contracts***

No contracts from this work program year are open; and 2 are in “Open/Complete” status.

#### ***FY 2006-07 Invoices Paid***

No invoices were paid during this period.

#### ***FY 2007-08 Work Program Contracts***

4 contracts from this work program year are open; and 5 are in “Open/Complete” status.

#### ***FY 2007-08 Invoices Paid***

No invoices were paid during this period.

#### ***FY 2008-09 Work Program Contracts***

2 contracts from this work program year are open; and 9 are in “Open/Complete” status.

#### ***FY 2008-09 Invoices Paid***

No invoices were paid during this period.

#### ***FY 2010-11 Work Program Contracts***

13 contracts from this work program year are open; and 32 are in “Open/Complete” status.

#### ***FY 2010-11 Invoices Paid***

2 invoices totaling \$285,000.00 were paid during this period.

#### ***FY 2011-12 Work Program Contracts***

23 contracts from this work program year are open, and 27 are in “Open/Complete” status. One contract moved into “Open/Complete” status during this period: City of Irvine, Contract #ML12046 – Purchase One Heavy-Duty Natural Gas Vehicle.

#### ***FY 2011-12 Invoices Paid***

2 invoices totaling \$108,850.19 were paid during this period.

#### ***FYs 2012-14 Work Program Contracts***

46 contracts from this work program year are open, and 17 are in “Open/Complete” status. One contract moved into “Open/Complete” status during this period: City of Irvine, Contract #ML14029 – Bicycle Trail Improvements.

#### *FYs 2012-14 Invoices Paid*

No invoices were paid during this period.

#### ***FYs 2014-16 Work Program Contracts***

83 contracts from this work program year are open, and 8 are in “Open/Complete” status. 3 contracts moved into “Open/Complete” status during this period: City of Rancho Cucamonga, Contract #ML16037 – Purchase One Heavy-Duty Natural Gas Vehicle; City of Ontario, Contract #ML16055 – Purchase 9 Heavy-Duty Natural Gas Vehicles; and City of Yucaipa, Contract #ML16079 – Purchase Commercial Electric Lawnmower.

#### *FYs 2014-16 Invoices Paid*

10 invoices totaling \$719,059.75 were paid during this period.

#### ***FYs 2016-18 Work Program Contracts***

One contracts from this work program year is open.

#### *FYs 2016-18 Invoices Paid*

2 invoices totaling \$3,234.00 were paid during this period.

#### ***Administrative Scope Changes***

4 administrative scope changes were initiated during the period of February 23 to May 10, 2017:

- Waste Resources, Contract #MS14079 (Install Limited Access CNG Station) – One-year term extension
- Phace Management Services/Mike Diamond, Contract #MS12033 (Purchase 20 Medium-Heavy-Duty On-Road Vehicles) – Reduce vehicles to six, and contract value to \$148,900
- Grand Central Recycling & Transfer Station, Contract #MS14082 (Expand Public Access CNG Station) – One-year no-cost term extension
- City of Westminster, Contract #ML16050 (Install Electric Vehicle Charging Stations) – Increase number of stations from 12 to 15, including one Fast Charge station, and 22-month extension to address five-year operation requirement for Fast Charge stations, at no additional cost

#### ***Attachments***

- FY 2004-05 through FYs 2016-18 (except FY 2005-06 and FY 2009-10) Contract Status Reports



## AB2766 Discretionary Fund Program Invoices

February 23, 2017 to May 10, 2017

Contract Admin.	MSRC Chair	MSRC Liaison	Finance	Contract #	Contractor	Invoice #	Amount
<i>2010-2011 Work Program</i>							
4/12/2017	4/19/2017	4/20/2017	4/28/2017	ML11029	City of Santa Ana	2	\$75,000.00
3/21/2017	3/23/2017	3/24/2017	3/28/2017	ML11041	City of Santa Ana	2	\$210,000.00
<b>Total: \$285,000.00</b>							
<i>2011-2012 Work Program</i>							
3/7/2017	3/7/2017	3/14/2017	3/14/2017	MS12060	City of Santa Monica	3	\$78,850.19
3/28/2017	4/11/2017	4/12/2017	4/12/2017	ML12046	City of Irvine	184775	\$30,000.00
<b>Total: \$108,850.19</b>							
<i>2014-2016 Work Program</i>							
3/21/2017	3/23/2017	3/24/2017	3/28/2017	ML16017	City of Long Beach	17-002 ADM	\$130,000.00
3/28/2017	4/11/2017	4/12/2017	4/12/2017	ML16037	City of Rancho Cucamonga	1-FINAL	\$30,000.00
3/2/2017	3/7/2017	3/14/2017	3/14/2017	MS16004	Mineral LLC	101853	\$300.00
4/4/2017	4/11/2017	4/12/2017	4/12/2017	MS16004	Mineral LLC	101870	\$300.00
5/10/2017				MS16004	Mineral LLC	102082	\$300.00
4/6/2017	4/11/2017	4/12/2017	4/12/2017	ML16055	City of Ontario	1-FINAL	\$270,000.00
4/11/2017	4/11/2017	4/12/2017	4/12/2017	MS16030	The Better World Group	1574	\$23,159.75
4/20/2017	4/27/2017	4/27/2017	5/3/2017	MS16097	Walnut Valley Unified School District	1	\$175,000.00
4/26/2017	4/27/2017	4/27/2017	5/3/2017	ML16024	City of Azusa	1-Final	\$30,000.00
4/26/2017	4/27/2017	4/27/2017	5/3/2017	ML16012	City of Carson	1-Final	\$60,000.00
<b>Total: \$719,059.75</b>							
<i>2016-2018 Work Program</i>							
4/20/2017	4/27/2017	4/27/2017	5/3/2017	MS18003	Geographics	17-20030	\$1,617.00
3/31/2017	4/19/2017	4/19/2017	4/26/2017	MS18003	Geographics	17-20000	\$1,617.00
<b>Total: \$3,234.00</b>							

**Total This Period: \$1,116,143.94**

## FYs 2004-05 Through 2014-16 AB2766 Contract Status Report

5/11/2017

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
<b>FY 2004-2005 Contracts</b>									
<b>Open Contracts</b>									
ML05014	Los Angeles County Department of P	5/21/2007	11/20/2008	3/20/2018	\$204,221.00	\$0.00	Traffic Signal Synchronization	\$204,221.00	No
<b>Total: 1</b>									
<b>Declined/Cancelled Contracts</b>									
ML05005	City of Highland				\$20,000.00	\$0.00	2 Medium Duty CNG Vehicles	\$20,000.00	No
ML05008	Los Angeles County Department of P				\$140,000.00	\$0.00	7 Heavy Duty LPG Street Sweepers	\$140,000.00	No
ML05010	Los Angeles County Department of P				\$20,000.00	\$0.00	1 Heavy Duty CNG Bus	\$20,000.00	No
MS05030	City of Inglewood				\$31,662.00	\$0.00	2 CNG Street Sweepers	\$31,662.00	No
MS05032	H&C Disposal				\$34,068.00	\$0.00	2 CNG Waste Haulers	\$34,068.00	No
MS05044	City of Colton				\$78,720.00	\$0.00	CNG Station Upgrade	\$78,720.00	No
<b>Total: 6</b>									
<b>Closed Contracts</b>									
ML05006	City of Colton Public Works	7/27/2005	7/26/2006		\$30,000.00	\$30,000.00	3 Medium Duty CNG Vehicles	\$0.00	Yes
ML05011	Los Angeles County Department of P	8/10/2006	12/9/2007	6/9/2008	\$52,409.00	\$51,048.46	3 Heavy Duty LPG Shuttle Vans	\$1,360.54	Yes
ML05013	Los Angeles County Department of P	1/5/2007	7/4/2008	1/4/2013	\$313,000.00	\$313,000.00	Traffic Signal Synchronization	\$0.00	Yes
ML05015	City of Lawndale	7/27/2005	7/26/2006		\$10,000.00	\$10,000.00	1 Medium Duty CNG Vehicle	\$0.00	Yes
ML05016	City of Santa Monica	9/23/2005	9/22/2006	9/22/2007	\$350,000.00	\$350,000.00	6 MD CNG Vehicles, 1 LPG Sweep, 13 CNG	\$0.00	Yes
ML05017	City of Signal Hill	1/16/2006	7/15/2007		\$126,000.00	\$126,000.00	Traffic Signal Synchronization	\$0.00	Yes
ML05018	City of San Bernardino	4/19/2005	4/18/2006		\$40,000.00	\$40,000.00	4 M.D. CNG Vehicles	\$0.00	Yes
ML05019	City of Lakewood	5/6/2005	5/5/2006		\$10,000.00	\$10,000.00	1 M.D. CNG Vehicle	\$0.00	Yes
ML05020	City of Pomona	6/24/2005	6/23/2006		\$10,000.00	\$10,000.00	1 M.D. CNG Vehicle	\$0.00	Yes
ML05021	City of Whittier	7/7/2005	7/6/2006	4/6/2008	\$100,000.00	\$80,000.00	Sweeper, Aerial Truck, & 3 Refuse Trucks	\$20,000.00	Yes
ML05022	City of Claremont	9/23/2005	9/22/2006		\$20,000.00	\$20,000.00	2 M.D. CNG Vehicles	\$0.00	Yes
ML05024	City of Cerritos	4/18/2005	3/17/2006		\$10,000.00	\$10,000.00	1 M.D. CNG Vehicle	\$0.00	Yes
ML05025	City of Malibu	5/6/2005	3/5/2006		\$10,000.00	\$10,000.00	1 Medium-Duty CNG Vehicle	\$0.00	Yes
ML05026	City of Inglewood	1/6/2006	1/5/2007	2/5/2009	\$60,000.00	\$60,000.00	2 CNG Transit Buses, 1 CNG Pothole Patch	\$0.00	Yes
ML05027	City of Beaumont	2/23/2006	4/22/2007	6/22/2010	\$20,000.00	\$20,000.00	1 H.D. CNG Bus	\$0.00	Yes
ML05028	City of Anaheim	9/8/2006	9/7/2007	5/7/2008	\$85,331.00	\$85,331.00	Traffic signal coordination & synchronization	\$0.00	Yes
ML05029	Los Angeles World Airports	5/5/2006	9/4/2007		\$140,000.00	\$140,000.00	Seven CNG Buses	\$0.00	Yes
ML05071	City of La Canada Flintridge	1/30/2009	1/29/2011		\$20,000.00	\$20,000.00	1 CNG Bus	\$0.00	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML05072	Los Angeles County Department of P	8/24/2009	5/23/2010	1/23/2011	\$349,000.00	\$349,000.00	Traffic Signal Synchronization (LADOT)	\$0.00	Yes
MS05001	A-Z Bus Sales, Inc.	2/4/2005	12/31/2005	12/31/2006	\$1,385,000.00	\$1,385,000.00	CNG School Bus Buydown	\$0.00	Yes
MS05002	California Bus Sales	2/4/2005	12/31/2005	12/31/2006	\$1,800,000.00	\$1,800,000.00	CNG School Bus Buydown	\$0.00	Yes
MS05003	BusWest	1/28/2005	12/31/2005	12/31/2006	\$2,100,000.00	\$1,620,000.00	CNG School Bus Buydown	\$480,000.00	Yes
MS05004	Johnson/Ukropina Creative Marketin	11/27/2004	1/18/2006	4/18/2006	\$1,000,000.00	\$994,612.56	Implement "Rideshare Thursday" Campaign	\$5,387.44	Yes
MS05031	City of Ontario, Housing & Municipal	7/22/2005	3/21/2007		\$191,268.00	\$191,268.00	11 CNG Waste Haulers	\$0.00	Yes
MS05033	Waste Management of the Desert	9/26/2005	5/25/2007		\$202,900.00	\$202,900.00	10 CNG Waste Haulers	\$0.00	Yes
MS05034	Sukut Equipment, Inc.	9/9/2005	5/8/2007		\$1,151,136.00	\$1,151,136.00	Repower 12 Scrapers	\$0.00	Yes
MS05035	Varner Construction Inc.	11/28/2005	4/27/2007	2/27/2008	\$334,624.00	\$334,624.00	Repower 5 Off-Road H.D. Vehicles	\$0.00	Yes
MS05036	Camarillo Engineering	8/18/2005	1/17/2007		\$1,167,276.00	\$1,167,276.00	Repower 12 Scrapers	\$0.00	Yes
MS05037	Road Builders, Inc.	11/21/2005	4/20/2007	6/20/2008	\$229,302.00	\$229,302.00	Repower 2 Scrapers	\$0.00	Yes
MS05038	SunLine Transit Agency	3/30/2006	9/29/2007		\$135,000.00	\$135,000.00	15 CNG Buses	\$0.00	Yes
MS05039	Los Angeles County MTA	4/28/2006	4/27/2008		\$405,000.00	\$405,000.00	75 CNG Buses	\$0.00	Yes
MS05040	Orange County Transportation Autho	3/23/2006	12/22/2007	6/22/2008	\$200,000.00	\$200,000.00	25 CNG Buses	\$0.00	Yes
MS05041	The Regents of the University of Cali	9/5/2006	8/4/2007	9/4/2008	\$15,921.00	\$15,921.00	CNG Station Upgrade	\$0.00	Yes
MS05042	City of Ontario, Housing & Municipal	11/21/2005	9/20/2006	7/20/2007	\$117,832.00	\$74,531.27	CNG Station Upgrade	\$43,300.73	Yes
MS05043	Whittier Union High School District	9/23/2005	7/22/2006		\$15,921.00	\$15,921.00	CNG Station Upgrade	\$0.00	Yes
MS05045	City of Covina	9/9/2005	7/8/2006		\$10,000.00	\$7,435.61	CNG Station Upgrade	\$2,564.39	Yes
MS05046	City of Inglewood	1/6/2006	5/5/2007		\$139,150.00	\$56,150.27	CNG Station Upgrade	\$82,999.73	Yes
MS05047	Orange County Transportation Autho	10/20/2005	10/19/2006	1/19/2007	\$75,563.00	\$75,563.00	CNG Station Upgrade	\$0.00	Yes
MS05048	City of Santa Monica	7/24/2006	11/23/2007		\$150,000.00	\$150,000.00	CNG Station Upgrade	\$0.00	Yes
MS05049	Omnitrans	9/23/2005	2/22/2007		\$25,000.00	\$7,250.00	CNG Station Upgrade	\$17,750.00	Yes
MS05050	Gateway Cities Council of Governme	12/21/2005	4/20/2010		\$1,464,839.00	\$1,464,838.12	Truck Fleet Modernization Program	\$0.88	Yes
MS05051	Jagur Tractor	1/16/2006	4/15/2007	10/15/2007	\$660,928.00	\$660,928.00	Repower 6 Scrapers	\$0.00	Yes
MS05052	Caufield Equipment, Inc.	8/3/2005	1/2/2007		\$478,000.00	\$478,000.00	Repower 4 Scrapers	\$0.00	Yes
MS05070	Haaland Internet Productions (HIP D	6/24/2005	5/31/2007	11/30/2011	\$100,715.00	\$92,458.24	Design, Host & Maintain MSRC Website	\$8,256.76	Yes

**Total: 44**

#### Closed/Incomplete Contracts

ML05007	Los Angeles County Dept of Beache	6/23/2006	6/22/2007	12/22/2007	\$50,000.00	\$0.00	5 Medium Duty CNG Vehicles	\$50,000.00	No
ML05009	Los Angeles County Department of P	6/22/2006	12/21/2007	9/30/2011	\$56,666.00	\$0.00	2 Propane Refueling Stations	\$56,666.00	No
ML05012	Los Angeles County Department of P	11/10/2006	5/9/2008	1/9/2009	\$349,000.00	\$0.00	Traffic Signal Synchronization (LADOT)	\$349,000.00	No
ML05023	City of La Canada Flintridge	3/30/2005	2/28/2006	8/28/2008	\$20,000.00	\$0.00	1 CNG Bus	\$20,000.00	No

**Total: 4**

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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## ***FY 2006-2007 Contracts***

### ***Declined/Cancelled Contracts***

ML07031	City of Santa Monica				\$180,000.00	\$0.00	Upgrade N.G. Station to Add Hythane	\$180,000.00	No
ML07032	City of Huntington Beach Public Wor				\$25,000.00	\$0.00	One H.D. CNG Vehicle	\$25,000.00	No
ML07035	City of Los Angeles, General Service				\$350,000.00	\$0.00	New CNG Refueling Station/Southeast Yard	\$350,000.00	No
ML07038	City of Palos Verdes Estates				\$25,000.00	\$0.00	One H.D. LPG Vehicle	\$25,000.00	No
MS07010	Palos Verdes Peninsula Transit Auth				\$80,000.00	\$0.00	Repower 4 Transit Buses	\$80,000.00	No
MS07014	Clean Energy Fuels Corp.				\$350,000.00	\$0.00	New L/CNG Station - SERRF	\$350,000.00	No
MS07015	Baldwin Park Unified School District				\$57,500.00	\$0.00	New CNG Station	\$57,500.00	No
MS07016	County of Riverside Fleet Services D				\$36,359.00	\$0.00	New CNG Station - Rubidoux	\$36,359.00	No
MS07017	County of Riverside Fleet Services D				\$33,829.00	\$0.00	New CNG Station - Indio	\$33,829.00	No
MS07018	City of Cathedral City				\$350,000.00	\$0.00	New CNG Station	\$350,000.00	No
MS07021	City of Riverside				\$350,000.00	\$0.00	New CNG Station	\$350,000.00	No
MS07050	Southern California Disposal Co.				\$320,000.00	\$0.00	Ten Nat. Gas Refuse Trucks	\$320,000.00	No
MS07062	Caltrans Division of Equipment				\$1,081,818.00	\$0.00	Off-Road Diesel Equipment Retrofit Program	\$1,081,818.00	No
MS07065	ECCO Equipment Corp.				\$174,525.00	\$0.00	Off-Road Diesel Equipment Retrofit Program	\$174,525.00	No
MS07067	Recycled Materials Company of Calif				\$99,900.00	\$0.00	Off-Road Diesel Equipment Retrofit Program	\$99,900.00	No
MS07069	City of Burbank	5/9/2008	3/8/2010	9/8/2011	\$8,895.00	\$0.00	Off-Road Diesel Equipment Retrofit Program	\$8,895.00	No
MS07074	Albert W. Davies, Inc.	1/25/2008	11/24/2009		\$39,200.00	\$0.00	Off-Road Diesel Equipment Retrofit Program	\$39,200.00	No
MS07081	Clean Diesel Technologies, Inc.				\$240,347.00	\$0.00	Off-Road Diesel Equipment Retrofit Program	\$240,347.00	No
MS07082	DCL International, Inc.				\$153,010.00	\$0.00	Off-Road Diesel Equipment Retrofit Program	\$153,010.00	No
MS07083	Dinex Exhausts, Inc.				\$52,381.00	\$0.00	Off-Road Diesel Equipment Retrofit Program	\$52,381.00	No
MS07084	Donaldson Company, Inc.				\$42,416.00	\$0.00	Off-Road Diesel Equipment Retrofit Program	\$42,416.00	No
MS07085	Engine Control Systems Limited				\$155,746.00	\$0.00	Off-Road Diesel Equipment Retrofit Program	\$155,746.00	No
MS07086	Huss, LLC				\$84,871.00	\$0.00	Off-Road Diesel Equipment Retrofit Program	\$84,871.00	No
MS07087	Mann+Hummel GmbH				\$189,361.00	\$0.00	Off-Road Diesel Equipment Retrofit Program	\$189,361.00	No
MS07088	Nett Technologies, Inc.				\$118,760.00	\$0.00	Off-Road Diesel Equipment Retrofit Program	\$118,760.00	No
MS07089	Rypos, Inc.				\$68,055.00	\$0.00	Off-Road Diesel Equipment Retrofit Program	\$68,055.00	No
MS07090	Sud-Chemie				\$27,345.00	\$0.00	Off-Road Diesel Equipment Retrofit Program	\$27,345.00	No

**Total: 27**

### ***Closed Contracts***

ML07023	City of Riverside	6/20/2008	10/19/2014	7/19/2016	\$462,500.00	\$461,476.42	CNG Station Expansion/Purch. 14 H.D. Vehi	\$1,023.58	Yes
ML07024	City of Garden Grove	3/7/2008	9/6/2014	7/6/2016	\$75,000.00	\$75,000.00	Three H.D. CNG Vehicles	\$0.00	Yes
ML07025	City of San Bernardino	8/12/2008	7/11/2010		\$350,000.00	\$350,000.00	Maintenance Facility Modifications	\$0.00	Yes
ML07026	City of South Pasadena	6/13/2008	6/12/2014		\$25,000.00	\$25,000.00	One H.D. CNG Vehicle	\$0.00	Yes
ML07027	Los Angeles World Airports	6/3/2008	7/2/2014		\$25,000.00	\$25,000.00	One H.D. LNG Vehicle	\$0.00	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML07028	City of Los Angeles, General Service	3/13/2009	3/12/2014		\$350,000.00	\$350,000.00	New CNG Refueling Station/Hollywood Yard	\$0.00	Yes
ML07029	City of Los Angeles, General Service	3/13/2009	3/12/2014		\$350,000.00	\$350,000.00	New CNG Refueling Station/Venice Yard	\$0.00	Yes
ML07030	County of San Bernardino Public Wo	7/11/2008	9/10/2015		\$200,000.00	\$200,000.00	8 Natural Gas H.D. Vehicles	\$0.00	Yes
ML07033	City of La Habra	5/21/2008	6/20/2014	11/30/2013	\$25,000.00	\$25,000.00	One H.D. Nat Gas Vehicle	\$0.00	Yes
ML07034	City of Los Angeles, General Service	3/13/2009	3/12/2014		\$350,000.00	\$350,000.00	New CNG Refueling Station/Van Nuys Yard	\$0.00	Yes
ML07036	City of Alhambra	1/23/2009	2/22/2015		\$50,000.00	\$50,000.00	2 H.D. CNG Vehicles	\$0.00	Yes
ML07037	City of Los Angeles, General Service	10/8/2008	10/7/2015		\$255,222.00	\$255,222.00	Upgrade LNG/LCNG Station/East Valley Yar	\$0.00	Yes
ML07039	City of Baldwin Park	6/6/2008	6/5/2014	8/5/2015	\$50,000.00	\$50,000.00	Two N.G. H.D. Vehicles	\$0.00	Yes
ML07040	City of Moreno Valley	6/3/2008	9/2/2014		\$25,000.00	\$25,000.00	One Heavy-Duty CNG Vehicle	\$0.00	Yes
ML07041	City of La Quinta	6/6/2008	6/5/2014		\$25,000.00	\$25,000.00	One CNG Street Sweeper	\$0.00	Yes
ML07042	City of La Quinta	8/15/2008	9/14/2010		\$100,000.00	\$100,000.00	Street Sweeping Operations	\$0.00	Yes
ML07043	City of Redondo Beach	9/28/2008	7/27/2014	10/27/2016	\$125,000.00	\$125,000.00	Five H.D. CNG Transit Vehicles	\$0.00	Yes
ML07044	City of Santa Monica	9/8/2008	3/7/2015	3/7/2017	\$600,000.00	\$600,000.00	24 H.D. Nat. Gas Vehicles	\$0.00	Yes
ML07046	City of Culver City Transportation De	5/2/2008	5/1/2014		\$25,000.00	\$25,000.00	One H.D. Nat. Gas Vehicle	\$0.00	Yes
ML07047	City of Cathedral City	6/16/2008	9/15/2014	3/15/2015	\$225,000.00	\$225,000.00	Two H.D. Nat. Gas Vehicles/New CNG Fueli	\$0.00	Yes
ML07048	City of Cathedral City	9/19/2008	10/18/2010		\$100,000.00	\$84,972.45	Street Sweeping Operations	\$15,027.55	Yes
MS07001	A-Z Bus Sales, Inc.	12/28/2006	12/31/2007	2/29/2008	\$1,920,000.00	\$1,380,000.00	CNG School Bus Buydown	\$540,000.00	Yes
MS07002	BusWest	1/19/2007	12/31/2007	3/31/2008	\$840,000.00	\$840,000.00	CNG School Bus Buydown	\$0.00	Yes
MS07003	Westport Fuel Systems, Inc.	11/2/2007	12/31/2011	6/30/2013	\$1,500,000.00	\$1,499,990.00	Advanced Nat. Gas Engine Incentive Progra	\$10.00	Yes
MS07005	S-W Compressors	3/17/2008	3/16/2010		\$60,000.00	\$7,500.00	Mountain CNG School Bus Demo Program-	\$52,500.00	Yes
MS07006	Coachella Valley Association of Gov	2/28/2008	10/27/2008		\$400,000.00	\$400,000.00	Coachella Valley PM10 Reduction Street Sw	\$0.00	Yes
MS07007	Los Angeles World Airports	5/2/2008	11/1/2014		\$420,000.00	\$420,000.00	Purchase CNG 21 Transit Buses	\$0.00	Yes
MS07009	Orange County Transportation Autho	5/14/2008	4/13/2016		\$800,000.00	\$800,000.00	Purchase 40 Transit Buses	\$0.00	Yes
MS07011	L A Service Authority for Freeway E	3/12/2010	5/31/2011	9/30/2011	\$700,000.00	\$700,000.00	"511" Commuter Services Campaign	\$0.00	Yes
MS07012	City of Los Angeles, General Service	6/13/2008	6/12/2009	6/12/2010	\$50,000.00	\$50,000.00	Maintenance Facility Modifications	\$0.00	Yes
MS07013	Rainbow Disposal Company, Inc.	1/25/2008	3/24/2014	9/24/2014	\$350,000.00	\$350,000.00	New High-Volume CNG Station	\$0.00	Yes
MS07019	City of Cathedral City	1/9/2009	6/8/2010		\$32,500.00	\$32,500.00	Maintenance Facility Modifications	\$0.00	Yes
MS07020	Avery Petroleum	5/20/2009	7/19/2015		\$250,000.00	\$250,000.00	New CNG Station	\$0.00	Yes
MS07049	Palm Springs Disposal Services	10/23/2008	11/22/2014	9/22/2016	\$96,000.00	\$96,000.00	Three Nat. Gas Refuse Trucks	\$0.00	Yes
MS07051	City of San Bernardino	8/12/2008	12/11/2014		\$480,000.00	\$480,000.00	15 Nat. Gas Refuse Trucks	\$0.00	Yes
MS07052	City of Redlands	7/30/2008	11/29/2014		\$160,000.00	\$160,000.00	Five Nat. Gas Refuse Trucks	\$0.00	Yes
MS07053	City of Claremont	7/31/2008	12/30/2014		\$96,000.00	\$96,000.00	Three Nat. Gas Refuse Trucks	\$0.00	Yes
MS07054	Republic Services, Inc.	3/7/2008	9/6/2014	9/6/2016	\$1,280,000.00	\$1,280,000.00	40 Nat. Gas Refuse Trucks	\$0.00	Yes
MS07055	City of Culver City Transportation De	7/8/2008	9/7/2014		\$192,000.00	\$192,000.00	Six Nat. Gas Refuse Trucks	\$0.00	Yes
MS07056	City of Whittier	9/5/2008	3/4/2015		\$32,000.00	\$32,000.00	One Nat. Gas Refuse Trucks	\$0.00	Yes
MS07057	CR&R, Inc.	7/31/2008	8/30/2014	6/30/2015	\$896,000.00	\$896,000.00	28 Nat. Gas Refuse Trucks	\$0.00	Yes
MS07058	The Better World Group	11/17/2007	11/16/2009	11/16/2011	\$247,690.00	\$201,946.21	MSRC Programmatic Outreach Services	\$45,743.79	Yes



Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
MS07059	County Sanitation Districts of L.A. Co	9/5/2008	9/4/2010	7/14/2012	\$231,500.00	\$231,500.00	Off-Road Diesel Equipment Retrofit Program	\$0.00	Yes
MS07060	Community Recycling & Resource R	3/7/2008	1/6/2010	7/6/2011	\$177,460.00	\$98,471.00	Off-Road Diesel Equipment Retrofit Program	\$78,989.00	Yes
MS07061	City of Los Angeles, Department of	10/31/2008	8/30/2010	2/28/2013	\$40,626.00	\$40,626.00	Off-Road Diesel Equipment Retrofit Program	\$0.00	Yes
MS07063	Shimmick Construction Company, In	4/26/2008	2/25/2010	8/25/2011	\$80,800.00	\$11,956.37	Off-Road Diesel Equipment Retrofit Program	\$68,843.63	Yes
MS07064	Altfillisch Contractors, Inc.	9/19/2008	7/18/2010	1/18/2011	\$160,000.00	\$155,667.14	Off-Road Diesel Equipment Retrofit Program	\$4,332.86	Yes
MS07068	Sukut Equipment Inc.	1/23/2009	11/22/2010	5/22/2012	\$26,900.00	\$26,900.00	Off-Road Diesel Equipment Retrofit Program	\$0.00	Yes
MS07070	Griffith Company	4/30/2008	2/28/2010	8/28/2012	\$168,434.00	\$125,504.00	Off-Road Diesel Equipment Retrofit Program	\$42,930.00	Yes
MS07071	Tiger 4 Equipment Leasing	9/19/2008	7/18/2010	1/18/2013	\$210,937.00	\$108,808.97	Off-Road Diesel Equipment Retrofit Program	\$102,128.03	Yes
MS07072	City of Culver City Transportation De	4/4/2008	2/3/2010	8/3/2011	\$72,865.00	\$72,865.00	Off-Road Diesel Equipment Retrofit Program	\$0.00	Yes
MS07075	Dan Copp Crushing	9/17/2008	7/16/2010	1/16/2012	\$73,600.00	\$40,200.00	Off-Road Diesel Equipment Retrofit Program	\$33,400.00	Yes
MS07076	Reed Thomas Company, Inc.	8/15/2008	6/14/2010	3/14/2012	\$339,073.00	\$100,540.00	Off-Road Diesel Equipment Retrofit Program	\$238,533.00	Yes
MS07077	USA Waste of California, Inc.	5/1/2009	12/31/2014		\$160,000.00	\$160,000.00	Five Nat. Gas Refuse Trucks (Santa Ana)	\$0.00	Yes
MS07078	USA Waste of California, Inc.	5/1/2009	12/31/2014	12/31/2015	\$256,000.00	\$256,000.00	Eight Nat. Gas Refuse Trucks (Dewey's)	\$0.00	Yes
MS07079	Riverside County Transportation Co	1/30/2009	7/29/2013	12/31/2011	\$20,000.00	\$15,165.45	BikeMetro Website Migration	\$4,834.55	Yes
MS07080	City of Los Angeles, Bureau of Sanit	10/31/2008	8/30/2010	8/28/2016	\$63,192.00	\$62,692.00	Off-Road Diesel Equipment Retrofit Program	\$500.00	No
MS07091	BusWest	10/16/2009	3/15/2010		\$33,660.00	\$33,660.00	Provide Lease for 2 CNG School Buses	\$0.00	Yes
MS07092	Riverside County Transportation Co	9/1/2010	10/31/2011		\$350,000.00	\$350,000.00	"511" Commuter Services Campaign	\$0.00	Yes

**Total: 59**

#### **Closed/Incomplete Contracts**

ML07045	City of Inglewood	2/6/2009	4/5/2015		\$75,000.00	\$25,000.00	3 H.D. Nat. Gas Vehicles	\$50,000.00	No
MS07004	BusWest	7/2/2007	7/1/2009		\$90,928.00	\$68,196.00	Provide Lease for 2 CNG School Buses	\$22,732.00	No
MS07066	Skanska USA Civil West California D	6/28/2008	4/27/2010	10/27/2010	\$111,700.00	\$36,128.19	Off-Road Diesel Equipment Retrofit Program	\$75,571.81	No
MS07073	PEED Equipment Co.	10/31/2008	8/30/2010		\$11,600.00	\$0.00	Off-Road Diesel Equipment Retrofit Program	\$11,600.00	No

**Total: 4**

#### **Open/Complete Contracts**

MS07008	City of Los Angeles, Department of T	9/18/2009	5/17/2020	9/17/2017	\$1,900,000.00	\$1,900,000.00	Purchase 95 Transit Buses	\$0.00	Yes
MS07022	CSULA Hydrogen Station and Resea	10/30/2009	12/29/2015	10/29/2019	\$250,000.00	\$250,000.00	New Hydrogen Fueling Station	\$0.00	Yes

**Total: 2**

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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## ***FY 2007-2008 Contracts***

### ***Open Contracts***

ML08028	City of Santa Monica	9/11/2009	9/10/2016	5/10/2019	\$600,000.00	\$0.00	24 CNG Heavy-Duty Vehicles	\$600,000.00	No
MS08007	United Parcel Service West Region	12/10/2008	10/9/2014	4/9/2019	\$300,000.00	\$0.00	10 H.D. Nat. Gas Vehicles	\$300,000.00	No
MS08013	United Parcel Service West Region	12/10/2008	10/9/2014	3/9/2019	\$480,000.00	\$216,000.00	12 H.D. Nat. Gas Yard Tractors	\$264,000.00	No
MS08068	Regents of the University of Californi	11/5/2010	11/4/2017	11/4/2019	\$400,000.00	\$0.00	Hydrogen Station	\$400,000.00	No

**Total: 4**

### ***Declined/Cancelled Contracts***

ML08032	City of Irvine	5/1/2009	8/31/2010		\$9,000.00	\$0.00	36 Vehicles (Diagnostic)	\$9,000.00	No
ML08041	City of Los Angeles, Dept of Transpo	8/6/2010	7/5/2011	12/5/2011	\$8,800.00	\$0.00	73 Vehicles (Diagnostic)	\$8,800.00	No
ML08049	City of Cerritos	3/20/2009	1/19/2015	2/19/2017	\$25,000.00	\$0.00	1 CNG Heavy-Duty Vehicle	\$25,000.00	No
ML08051	City of Colton				\$75,000.00	\$0.00	3 CNG Heavy-Duty Vehicles	\$75,000.00	No
ML08080	City of Irvine	5/1/2009	5/31/2015		\$50,000.00	\$0.00	Two Heavy-Duty Nat. Gas Vehicles	\$50,000.00	No
MS08002	Orange County Transportation Autho				\$1,500,000.00	\$0.00	Big Rig Freeway Service Patrol	\$1,500,000.00	No
MS08008	Diversified Truck Rental & Leasing				\$300,000.00	\$0.00	10 H.D. Nat. Gas Vehicles	\$300,000.00	No
MS08010	Orange County Transportation Autho				\$10,000.00	\$0.00	20 H.D. Nat. Gas Vehicles	\$10,000.00	No
MS08011	Green Fleet Systems, LLC				\$10,000.00	\$0.00	30 H.D. Nat. Gas Vehicles	\$10,000.00	No
MS08052	Burrtec Waste Industries, Inc.	12/24/2008	11/23/2014	11/23/2015	\$100,000.00	\$0.00	New CNG Station - Fontana	\$100,000.00	No
MS08054	Clean Energy Fuels Corp.				\$400,000.00	\$0.00	New LNG Station - Fontana	\$400,000.00	No
MS08055	Clean Energy Fuels Corp.	11/26/2009	3/25/2016	3/25/2017	\$400,000.00	\$0.00	New LNG Station - Long Beach-Pier S	\$400,000.00	No
MS08059	Burrtec Waste Industries, Inc.	12/24/2008	11/23/2014		\$100,000.00	\$0.00	New CNG Station - San Bernardino	\$100,000.00	No
MS08060	Burrtec Waste Industries, Inc.	12/24/2008	11/23/2014		\$100,000.00	\$0.00	New CNG Station - Azusa	\$100,000.00	No
MS08062	Go Natural Gas	9/25/2009	1/24/2016	1/24/2017	\$400,000.00	\$0.00	New CNG Station - Rialto	\$400,000.00	No
MS08074	Fontana Unified School District	11/14/2008	12/13/2014		\$200,000.00	\$0.00	Expansion of Existing CNG station	\$200,000.00	No
MS08077	Hythane Company, LLC				\$144,000.00	\$0.00	Upgrade Station to Hythane	\$144,000.00	No

**Total: 17**

### ***Closed Contracts***

ML08023	City of Villa Park	11/7/2008	10/6/2012		\$6,500.00	\$5,102.50	Upgrade of Existing Refueling Facility	\$1,397.50	Yes
ML08026	Los Angeles County Department of P	7/20/2009	7/19/2016		\$250,000.00	\$250,000.00	10 LPG Heavy-Duty Vehicles	\$0.00	Yes
ML08027	Los Angeles County Department of P	7/20/2009	1/19/2011	1/19/2012	\$6,901.00	\$5,124.00	34 Vehicles (Diagnostic)	\$1,777.00	Yes
ML08029	City of Gardena	3/19/2009	1/18/2015		\$25,000.00	\$25,000.00	1 Propane Heavy-Duty Vehicle	\$0.00	Yes
ML08030	City of Azusa	5/14/2010	3/13/2016		\$25,000.00	\$25,000.00	1 CNG Heavy-Duty Vehicle	\$0.00	No
ML08031	City of Claremont	3/27/2009	3/26/2013	3/26/2015	\$97,500.00	\$97,500.00	Upgrade of Existing CNG Station, Purchase	\$0.00	Yes
ML08033	County of San Bernardino Public Wo	4/3/2009	2/2/2010		\$14,875.00	\$14,875.00	70 Vehicles (Diagnostic)	\$0.00	Yes
ML08034	County of San Bernardino Public Wo	3/27/2009	7/26/2015		\$150,000.00	\$150,000.00	8 CNG Heavy-Duty Vehicles	\$0.00	Yes
ML08035	City of La Verne	3/6/2009	11/5/2009		\$11,925.00	\$11,925.00	53 Vehicles (Diagnostic)	\$0.00	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML08036	City of South Pasadena	5/12/2009	7/11/2013		\$169,421.00	\$169,421.00	New CNG Station	\$0.00	Yes
ML08037	City of Glendale	5/20/2009	5/19/2015		\$325,000.00	\$325,000.00	13 CNG Heavy-Duty Vehicles	\$0.00	Yes
ML08038	Los Angeles Department of Water an	7/16/2010	7/15/2017		\$1,050,000.00	\$1,050,000.00	42 CNG Heavy-Duty Vehicles	\$0.00	Yes
ML08039	City of Rancho Palos Verdes	6/5/2009	8/4/2015		\$50,000.00	\$50,000.00	2 LPG Transit Buses	\$0.00	Yes
ML08042	City of Ontario, Housing & Municipal	5/1/2009	1/31/2016		\$175,000.00	\$175,000.00	7 CNG Heavy-Duty Vehicles	\$0.00	Yes
ML08044	City of Chino	3/19/2009	3/18/2015		\$25,000.00	\$25,000.00	1 CNG Heavy-Duty Vehicle	\$0.00	Yes
ML08045	City of Santa Clarita	2/20/2009	6/19/2010		\$3,213.00	\$3,150.00	14 Vehicles (Diagnostic)	\$63.00	Yes
ML08046	City of Paramount	2/20/2009	2/19/2015		\$25,000.00	\$25,000.00	1 CNG Heavy-Duty Vehicle	\$0.00	Yes
ML08047	City of Culver City Transportation De	5/12/2009	8/11/2015		\$150,000.00	\$150,000.00	6 CNG Heavy-Duty Vehicles	\$0.00	Yes
ML08048	City of Santa Clarita	2/20/2009	6/19/2015		\$25,000.00	\$25,000.00	1 CNG Heavy-Duty Vehicle	\$0.00	Yes
ML08050	City of Laguna Beach Public Works	8/12/2009	4/11/2016	10/11/2016	\$75,000.00	\$75,000.00	3 LPG Trolleys	\$0.00	Yes
MS08001	Los Angeles County MTA	12/10/2010	6/9/2014		\$1,500,000.00	\$1,499,999.66	Big Rig Freeway Service Patrol	\$0.34	Yes
MS08003	A-Z Bus Sales, Inc.	5/2/2008	12/31/2008	2/28/2009	\$1,480,000.00	\$1,400,000.00	Alternative Fuel School Bus Incentive Progra	\$80,000.00	Yes
MS08004	BusWest	5/2/2008	12/31/2008		\$1,440,000.00	\$1,440,000.00	Alternative Fuel School Bus Incentive Progra	\$0.00	Yes
MS08005	Burrtec Waste Industries, Inc.	10/23/2008	11/22/2014	10/22/2015	\$450,000.00	\$450,000.00	15 H.D. Nat. Gas Vehicles - Azusa	\$0.00	Yes
MS08006	Burrtec Waste Industries, Inc.	10/23/2008	11/22/2014	10/22/2015	\$450,000.00	\$450,000.00	15 H.D. Nat. Gas Vehicles - Saugus	\$0.00	Yes
MS08009	Los Angeles World Airports	12/24/2008	12/23/2014		\$870,000.00	\$870,000.00	29 H.D. Nat. Gas Vehicles	\$0.00	Yes
MS08012	California Cartage Company, LLC	12/21/2009	10/20/2015	4/20/2016	\$480,000.00	\$480,000.00	12 H.D. Nat. Gas Yard Tractors	\$0.00	Yes
MS08014	City of San Bernardino	12/5/2008	6/4/2015		\$390,000.00	\$360,000.00	13 H.D. Nat. Gas Vehicles	\$30,000.00	Yes
MS08015	Yosemite Waters	5/12/2009	5/11/2015		\$180,000.00	\$117,813.60	11 H.D. Propane Vehicles	\$62,186.40	Yes
MS08016	TransVironmental Solutions, Inc.	1/23/2009	12/31/2010	9/30/2011	\$227,198.00	\$80,351.34	Rideshare 2 School Program	\$146,846.66	Yes
MS08017	Omnitrans	12/13/2008	12/12/2015	12/12/2016	\$900,000.00	\$900,000.00	30 CNG Buses	\$0.00	Yes
MS08019	Enterprise Rent-A-Car Company of L	2/12/2010	7/11/2016		\$300,000.00	\$300,000.00	10 CNG Vehicles	\$0.00	Yes
MS08020	Ware Disposal Company, Inc.	11/25/2008	2/24/2016		\$900,000.00	\$900,000.00	30 CNG Vehicles	\$0.00	Yes
MS08021	CalMet Services, Inc.	1/9/2009	1/8/2016	7/8/2016	\$900,000.00	\$900,000.00	30 CNG Vehicles	\$0.00	Yes
MS08022	SunLine Transit Agency	12/18/2008	3/17/2015		\$311,625.00	\$311,625.00	15 CNG Buses	\$0.00	Yes
MS08053	City of Los Angeles, Bureau of Sanit	2/18/2009	12/17/2015		\$400,000.00	\$400,000.00	New LNG/CNG Station	\$0.00	Yes
MS08056	Clean Energy Fuels Corp.	11/26/2009	2/25/2015		\$400,000.00	\$400,000.00	New LNG Station - POLB-Anah. & I	\$0.00	Yes
MS08057	Orange County Transportation Autho	5/14/2009	7/13/2015		\$400,000.00	\$400,000.00	New CNG Station - Garden Grove	\$0.00	Yes
MS08061	Clean Energy Fuels Corp.	12/4/2009	3/3/2015		\$400,000.00	\$400,000.00	New CNG Station - L.A.-La Cienega	\$0.00	Yes
MS08063	Go Natural Gas	9/25/2009	1/24/2016	1/24/2017	\$400,000.00	\$400,000.00	New CNG Station - Moreno Valley	\$0.00	Yes
MS08064	Hemet Unified School District	1/9/2009	3/8/2015		\$75,000.00	\$75,000.00	Expansion of Existing Infrastructure	\$0.00	Yes
MS08065	Pupil Transportation Cooperative	11/20/2008	7/19/2014		\$10,500.00	\$10,500.00	Existing CNG Station Modifications	\$0.00	Yes
MS08066	Clean Energy Fuels Corp.	11/26/2009	2/25/2015		\$400,000.00	\$400,000.00	New CNG Station - Palm Spring Airport	\$0.00	Yes
MS08067	Trillium CNG	3/19/2009	6/18/2015	6/18/2016	\$311,600.00	\$254,330.00	New CNG Station	\$57,270.00	Yes
MS08069	Perris Union High School District	6/5/2009	8/4/2015	8/4/2016	\$225,000.00	\$225,000.00	New CNG Station	\$0.00	Yes
MS08070	Clean Energy Fuels Corp.	11/26/2009	2/25/2015		\$400,000.00	\$400,000.00	New CNG Station - Paramount	\$0.00	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
MS08071	ABC Unified School District	1/16/2009	1/15/2015		\$63,000.00	\$63,000.00	New CNG Station	\$0.00	Yes
MS08072	Clean Energy Fuels Corp.	12/4/2009	3/3/2015		\$400,000.00	\$354,243.38	New CNG Station - Burbank	\$45,756.62	Yes
MS08073	Clean Energy Fuels Corp.	11/26/2009	2/25/2015		\$400,000.00	\$400,000.00	New CNG Station - Norwalk	\$0.00	Yes
MS08075	Disneyland Resort	12/10/2008	2/1/2015		\$200,000.00	\$200,000.00	Expansion of Existing CNG Infrastructure	\$0.00	Yes
MS08076	Azusa Unified School District	10/17/2008	11/16/2014	1/31/2017	\$172,500.00	\$172,500.00	New CNG station and maint. Fac. Modificati	\$0.00	Yes
MS08078	SunLine Transit Agency	12/10/2008	6/9/2015	2/9/2016	\$189,000.00	\$189,000.00	CNG Station Upgrade	\$0.00	Yes
MS09002	A-Z Bus Sales, Inc.	11/7/2008	12/31/2009	12/31/2010	\$2,520,000.00	\$2,460,000.00	Alternative Fuel School Bus Incentive Progra	\$60,000.00	Yes
MS09004	A-Z Bus Sales, Inc.	1/30/2009	3/31/2009		\$156,000.00	\$156,000.00	Alternative Fuel School Bus Incentive Progra	\$0.00	Yes
MS09047	BusWest	7/9/2010	12/31/2010	4/30/2011	\$480,000.00	\$480,000.00	Alternative Fuel School Bus Incentive Progra	\$0.00	Yes

**Total: 55**

#### **Closed/Incomplete Contracts**

ML08025	Los Angeles County Department of P	10/30/2009	3/29/2011		\$75,000.00	\$0.00	150 Vehicles (Diagnostic)	\$75,000.00	No
MS08079	ABC Unified School District	1/16/2009	12/15/2009	12/15/2010	\$50,000.00	\$0.00	Maintenance Facility Modifications	\$50,000.00	No

**Total: 2**

#### **Open/Complete Contracts**

ML08024	City of Anaheim	7/9/2010	7/8/2017	1/8/2018	\$425,000.00	\$425,000.00	9 LPG Buses and 8 CNG Buses	\$0.00	Yes
ML08040	City of Riverside	9/11/2009	9/10/2016	3/10/2019	\$455,500.00	\$455,500.00	16 CNG Vehicles, Expand CNG Station & M	\$0.00	Yes
ML08043	City of Desert Hot Springs	9/25/2009	3/24/2016	3/24/2021	\$25,000.00	\$25,000.00	1 CNG Heavy-Duty Vehicle	\$0.00	Yes
MS08018	Los Angeles County Department of P	8/7/2009	10/6/2016	4/6/2018	\$60,000.00	\$60,000.00	2 CNG Vehicles	\$0.00	Yes
MS08058	Clean Energy Fuels Corp.	11/26/2009	3/25/2016	3/25/2017	\$400,000.00	\$400,000.00	New CNG Station - Ontario Airport	\$0.00	Yes

**Total: 5**

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
<b>FY 2008-2009 Contracts</b>									
<b>Open Contracts</b>									
ML09033	City of Beverly Hills	3/4/2011	5/3/2017	5/3/2018	\$550,000.00	\$100,000.00	10 Nat. Gas Heavy-Duty Vehicles & CNG St	\$450,000.00	No
ML09036	City of Long Beach Fleet Services B	5/7/2010	5/6/2017	5/6/2020	\$875,000.00	\$525,000.00	Purchase 35 LNG Refuse Trucks	\$350,000.00	No
<b>Total: 2</b>									
<b>Declined/Cancelled Contracts</b>									
ML09017	County of San Bernardino Public Wo	1/28/2010	7/27/2016		\$200,000.00	\$0.00	8 Nat. Gas Heavy-Duty Vehicles	\$200,000.00	No
ML09018	Los Angeles Department of Water an	7/16/2010	9/15/2012		\$850,000.00	\$0.00	Retrofit 85 Off-Road Vehicles w/DECS	\$850,000.00	No
ML09019	City of San Juan Capistrano Public	12/4/2009	11/3/2010		\$10,125.00	\$0.00	Remote Vehicle Diagnostics/45 Vehicles	\$10,125.00	No
ML09022	Los Angeles County Department of P				\$8,250.00	\$0.00	Remote Vehicle Diagnostics/15 Vehicles	\$8,250.00	No
ML09025	Los Angeles County Department of P	10/15/2010	12/14/2012	6/14/2013	\$50,000.00	\$0.00	Remote Vehicle Diagnostics/85 Vehicles	\$50,000.00	No
ML09028	Riverside County Waste Manageme				\$140,000.00	\$0.00	Retrofit 7 Off-Road Vehicles w/DECS	\$140,000.00	No
ML09039	City of Inglewood				\$310,000.00	\$0.00	Purchase 12 H.D. CNG Vehicles and Remot	\$310,000.00	No
ML09040	City of Cathedral City				\$83,125.00	\$0.00	Purchase 3 H.D. CNG Vehicles and Remote	\$83,125.00	No
ML09044	City of San Dimas				\$425,000.00	\$0.00	Install CNG Station and Purchase 1 CNG S	\$425,000.00	No
ML09045	City of Orange				\$125,000.00	\$0.00	Purchase 5 CNG Sweepers	\$125,000.00	No
MS09003	FuelMaker Corporation				\$296,000.00	\$0.00	Home Refueling Apparatus Incentives	\$296,000.00	No
<b>Total: 11</b>									
<b>Closed Contracts</b>									
ML09007	City of Rancho Cucamonga	2/26/2010	4/25/2012		\$117,500.00	\$62,452.57	Maintenance Facility Modification	\$55,047.43	Yes
ML09008	City of Culver City Transportation De	1/19/2010	7/18/2016	7/18/2017	\$175,000.00	\$175,000.00	8 Nat. Gas Heavy-Duty Vehicles	\$0.00	Yes
ML09010	City of Palm Springs	1/8/2010	2/7/2016		\$25,000.00	\$25,000.00	1 Nat. Gas Heavy-Duty Vehicle	\$0.00	Yes
ML09011	City of San Bernardino	2/19/2010	5/18/2016		\$250,000.00	\$250,000.00	10 Nat. Gas Heavy-Duty Vehicles	\$0.00	Yes
ML09012	City of Gardena	3/12/2010	11/11/2015		\$25,000.00	\$25,000.00	1 Nat. Gas Heavy-Duty Vehicle	\$0.00	Yes
ML09013	City of Riverside Public Works	9/10/2010	12/9/2011	7/31/2013	\$144,470.00	\$128,116.75	Traffic Signal Synchr./Moreno Valley	\$16,353.25	Yes
ML09014	City of Riverside Public Works	9/10/2010	12/9/2011	7/31/2013	\$113,030.00	\$108,495.94	Traffic Signal Synchr./Corona	\$4,534.06	Yes
ML09015	City of Riverside Public Works	9/10/2010	12/9/2011	7/31/2013	\$80,060.00	\$79,778.52	Traffic Signal Synchr./Co. of Riverside	\$281.48	Yes
ML09016	County of San Bernardino Public Wo	1/28/2010	3/27/2014		\$50,000.00	\$50,000.00	Install New CNG Station	\$0.00	Yes
ML09020	County of San Bernardino	8/16/2010	2/15/2012		\$49,770.00	\$49,770.00	Remote Vehicle Diagnostics/252 Vehicles	\$0.00	Yes
ML09021	City of Palm Desert	7/9/2010	3/8/2012		\$39,450.00	\$38,248.87	Traffic Signal Synchr./Rancho Mirage	\$1,201.13	Yes
ML09024	Los Angeles County Department of P	10/15/2010	12/14/2012	6/14/2013	\$400,000.00	\$0.00	Maintenance Facility Modifications	\$400,000.00	No
ML09027	Los Angeles County Department of P	7/23/2010	3/22/2012	6/22/2012	\$150,000.00	\$150,000.00	Freeway Detector Map Interface	\$0.00	Yes
ML09029	City of Whittier	11/6/2009	4/5/2016		\$25,000.00	\$25,000.00	1 Nat. Gas Heavy-Duty Vehicle	\$0.00	Yes
ML09030	City of Los Angeles GSD/Fleet Servi	6/18/2010	6/17/2011		\$22,310.00	\$22,310.00	Remote Vehicle Diagnostics/107 Vehicles	\$0.00	Yes
ML09034	City of La Palma	11/25/2009	6/24/2015		\$25,000.00	\$25,000.00	1 LPG Heavy-Duty Vehicle	\$0.00	Yes
ML09037	City of Redondo Beach	6/18/2010	6/17/2016		\$50,000.00	\$50,000.00	Purchase Two CNG Sweepers	\$0.00	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML09038	City of Chino	9/27/2010	5/26/2017		\$250,000.00	\$250,000.00	Upgrade Existing CNG Station	\$0.00	Yes
ML09046	City of Newport Beach	5/20/2010	5/19/2016		\$162,500.00	\$162,500.00	Upgrade Existing CNG Station, Maintenance	\$0.00	Yes
ML09047	Los Angeles County Department of P	8/13/2014	8/12/2015	11/12/2015	\$400,000.00	\$272,924.53	Maintenance Facility Modifications	\$127,075.47	No
MS09001	Administrative Services Co-Op/Long	3/5/2009	6/30/2012	12/31/2013	\$225,000.00	\$150,000.00	15 CNG Taxicabs	\$75,000.00	Yes
MS09005	Gas Equipment Systems, Inc.	6/19/2009	10/18/2010		\$71,000.00	\$71,000.00	Provide Temp. Fueling for Mountain Area C	\$0.00	Yes

**Total: 22**

#### Open/Complete Contracts

ML09009	City of South Pasadena	11/5/2010	12/4/2016	3/4/2019	\$125,930.00	\$125,930.00	CNG Station Expansion	\$0.00	Yes
ML09023	Los Angeles County Department of P	12/10/2010	12/9/2017		\$50,000.00	\$50,000.00	2 Heavy-Duty Alternative Fuel Transit Vehicl	\$0.00	Yes
ML09026	Los Angeles County Department of P	10/15/2010	10/14/2017	4/14/2019	\$150,000.00	\$80,411.18	3 Off-Road Vehicles Repowers	\$69,588.82	Yes
ML09031	City of Los Angeles, Department of	10/29/2010	10/28/2017		\$825,000.00	\$825,000.00	33 Nat. Gas Heavy-Duty Vehicles	\$0.00	Yes
ML09032	Los Angeles World Airports	4/8/2011	4/7/2018		\$175,000.00	\$175,000.00	7 Nat. Gas Heavy-Duty Vehicles	\$0.00	Yes
ML09035	City of Fullerton	6/17/2010	6/16/2017	12/16/2018	\$450,000.00	\$450,000.00	2 Heavy-Duty CNG Vehicles & Install CNG	\$0.00	Yes
ML09041	City of Los Angeles, Bureau of Sanit	10/1/2010	9/30/2017		\$875,000.00	\$875,000.00	Purchase 35 H.D. Nat. Gas Vehicles	\$0.00	Yes
ML09042	Los Angeles Department of Water an	12/10/2010	12/9/2017		\$1,400,000.00	\$1,400,000.00	Purchase 56 Dump Trucks	\$0.00	Yes
ML09043	City of Covina	10/8/2010	4/7/2017	10/7/2018	\$179,591.00	\$179,591.00	Upgrade Existing CNG Station	\$0.00	Yes

**Total: 9**

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
<b>FY 2010-2011 Contracts</b>									
<b>Open Contracts</b>									
ML11020	City of Indio	2/1/2013	3/31/2019	9/30/2019	\$30,000.00	\$0.00	Retrofit one H.D. Vehicles w/DECS, repower	\$30,000.00	No
ML11024	County of Los Angeles, Dept of Publi	12/5/2014	6/4/2022		\$90,000.00	\$0.00	Purchase 3 Nat. Gas H.D. Vehicles	\$90,000.00	No
ML11029	City of Santa Ana	9/7/2012	3/6/2020	3/6/2023	\$262,500.00	\$75,000.00	Expansion of Existing CNG Station, Install N	\$187,500.00	No
ML11032	City of Gardena	3/2/2012	9/1/2018	10/1/2020	\$102,500.00	\$0.00	Modify Maint. Facility, Expand CNG station,	\$102,500.00	No
ML11036	City of Riverside	1/27/2012	1/26/2019	3/26/2021	\$670,000.00	\$0.00	Install New CNG Station, Purchase 9 H.D. N	\$670,000.00	No
ML11038	City of Santa Monica	5/18/2012	7/17/2018		\$400,000.00	\$0.00	Maintenance Facility Modifications	\$400,000.00	No
ML11040	City of South Pasadena	5/4/2012	1/3/2019	1/3/2022	\$30,000.00	\$0.00	Purchase 1 Nat. Gas H.D. Vehicle	\$30,000.00	No
ML11041	City of Santa Ana	9/7/2012	11/6/2018	1/6/2021	\$265,000.00	\$244,651.86	Purchase 7 LPG H.D. Vehicles, Retrofit 6 H.	\$20,348.14	No
ML11045	City of Newport Beach	2/3/2012	8/2/2018	8/2/2020	\$30,000.00	\$0.00	Purchase 1 Nat. Gas H.D. Vehicle	\$30,000.00	No
MS11065	Temecula Valley Unified School Distr	8/11/2012	1/10/2019		\$50,000.00	\$46,112.64	Expansion of Existing CNG Station	\$3,887.36	No
MS11085	City of Long Beach Fleet Services B	8/23/2013	12/22/2016		\$159,012.00	\$0.00	Retrofit Seven H.D. Off-Road Vehicles Unde	\$159,012.00	No
MS11091	California Cartage Company, LLC	4/5/2013	8/4/2016	2/4/2018	\$55,000.00	\$0.00	Retrofit Two H.D. Off-Road Vehicles Under	\$55,000.00	No
MS11092	Griffith Company	2/15/2013	6/14/2016	12/14/2017	\$390,521.00	\$78,750.00	Retrofit 17 H.D. Off-Road Vehicles Under Sh	\$311,771.00	No
<b>Total: 13</b>									
<b>Declined/Cancelled Contracts</b>									
MS11013	Go Natural Gas, Inc.				\$150,000.00	\$0.00	New CNG Station - Huntington Beach	\$150,000.00	No
MS11014	Go Natural Gas, Inc.				\$150,000.00	\$0.00	New CNG Station - Santa Ana	\$150,000.00	No
MS11015	Go Natural Gas, Inc.				\$150,000.00	\$0.00	New CNG Station - Inglewood	\$150,000.00	No
MS11046	Luis Castro				\$40,000.00	\$0.00	Repower One Heavy-Duty Vehicle	\$40,000.00	No
MS11047	Ivan Borjas				\$40,000.00	\$0.00	Repower One Heavy-Duty Vehicle	\$40,000.00	No
MS11048	Phase II Transportation				\$1,080,000.00	\$0.00	Repower 27 Heavy-Duty Vehicles	\$1,080,000.00	No
MS11049	Ruben Caceras				\$40,000.00	\$0.00	Repower One Heavy-Duty Vehicle	\$40,000.00	No
MS11050	Carlos Arrue				\$40,000.00	\$0.00	Repower One Heavy-Duty Vehicle	\$40,000.00	No
MS11051	Francisco Vargas				\$40,000.00	\$0.00	Repower One Heavy-Duty Vehicle	\$40,000.00	No
MS11053	Jose Ivan Soltero				\$40,000.00	\$0.00	Repower One Heavy-Duty Vehicle	\$40,000.00	No
MS11054	Albino Meza				\$40,000.00	\$0.00	Repower One Heavy-Duty Vehicle	\$40,000.00	No
MS11059	Go Natural Gas				\$150,000.00	\$0.00	New Public Access CNG Station - Paramou	\$150,000.00	No
MS11063	Standard Concrete Products				\$310,825.00	\$0.00	Retrofit Two Off-Road Vehicles under Showc	\$310,825.00	No
MS11070	American Honda Motor Company				\$100,000.00	\$0.00	Expansion of Existing CNG Station	\$100,000.00	No
MS11072	Trillium USA Company DBA Californi				\$150,000.00	\$0.00	New Public Access CNG Station	\$150,000.00	No
MS11077	DCL America Inc.				\$263,107.00	\$0.00	Retrofit of 13 Off-Road Diesel Vehicles with	\$263,107.00	No
MS11083	Catrac Construction, Inc.				\$500,000.00	\$0.00	Install DECS on Eight Off-Road Vehicles	\$500,000.00	No
MS11084	Ivanhoe Energy Services and Develo				\$66,750.00	\$0.00	Retrofit One H.D. Off-Road Vehicle Under S	\$66,750.00	No
MS11088	Diesel Emission Technologies				\$32,750.00	\$0.00	Retrofit Three H.D. Off-Road Vehicles Under	\$32,750.00	No



Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
MS11089	Diesel Emission Technologies				\$9,750.00	\$0.00	Retrofit One H.D. Off-Road Vehicle Under S	\$9,750.00	No
MS11090	Diesel Emission Technologies				\$14,750.00	\$0.00	Retrofit One H.D. Off-Road Vehicle Under S	\$14,750.00	No

**Total: 21**

#### Closed Contracts

ML11007	Coachella Valley Association of Gov	7/29/2011	7/28/2012		\$250,000.00	\$249,999.96	Regional PM10 Street Sweeping Program	\$0.04	Yes
ML11027	City of Los Angeles, Dept. of Genera	5/4/2012	7/3/2015	1/3/2016	\$300,000.00	\$300,000.00	Maintenance Facility Modifications	\$0.00	Yes
ML11035	City of La Quinta	11/18/2011	11/17/2012		\$25,368.00	\$25,368.00	Retrofit 3 On-Road Vehicles w/DECS	\$0.00	Yes
MS11001	Mineral LLC	4/22/2011	4/30/2013	4/30/2015	\$111,827.00	\$103,136.83	Design, Develop, Host and Maintain MSRC	\$8,690.17	Yes
MS11002	A-Z Bus Sales, Inc.	7/15/2011	12/31/2011	6/30/2013	\$1,705,000.00	\$1,705,000.00	Alternative Fuel School Bus Incentive Progra	\$0.00	Yes
MS11003	BusWest	7/26/2011	12/31/2011	12/31/2012	\$1,305,000.00	\$1,305,000.00	Alternative Fuel School Bus Incentive Progra	\$0.00	Yes
MS11004	Los Angeles County MTA	9/9/2011	2/29/2012		\$450,000.00	\$299,743.34	Clean Fuel Transit Service to Dodger Stadiu	\$150,256.66	Yes
MS11006	Orange County Transportation Autho	10/7/2011	2/29/2012	8/31/2012	\$268,207.00	\$160,713.00	Metrolink Service to Angel Stadium	\$107,494.00	Yes
MS11018	Orange County Transportation Autho	10/14/2011	1/31/2012		\$211,360.00	\$211,360.00	Express Bus Service to Orange County Fair	\$0.00	Yes
MS11052	Krisda Inc	9/27/2012	6/26/2013		\$120,000.00	\$120,000.00	Repower Three Heavy-Duty Vehicles	\$0.00	Yes
MS11056	The Better World Group	12/30/2011	12/29/2013	12/29/2015	\$206,836.00	\$186,953.46	Programmatic Outreach Services	\$19,882.54	Yes
MS11057	Riverside County Transportation Co	7/28/2012	3/27/2013		\$100,000.00	\$89,159.40	Develop and Implement 511 "Smart Phone"	\$10,840.60	Yes
MS11058	L A Service Authority for Freeway E	5/31/2013	4/30/2014		\$123,395.00	\$123,395.00	Implement 511 "Smart Phone" Application	\$0.00	Yes
MS11061	Eastern Municipal Water District	3/29/2012	5/28/2015		\$11,659.00	\$1,450.00	Retrofit One Off-Road Vehicle under Showc	\$10,209.00	Yes
MS11062	Load Center	9/7/2012	1/6/2016	12/6/2016	\$175,384.00	\$169,883.00	Retrofit Six Off-Road Vehicles under Showc	\$5,501.00	Yes
MS11074	SunLine Transit Agency	5/11/2012	7/31/2012		\$41,849.00	\$22,391.00	Transit Service for Coachella Valley Festival	\$19,458.00	Yes
MS11080	Southern California Regional Rail Au	4/6/2012	7/31/2012		\$26,000.00	\$26,000.00	Metrolink Service to Auto Club Speedway	\$0.00	Yes
MS11086	DCL America Inc.	6/7/2013	10/6/2016		\$500,000.00	\$359,076.96	Retrofit Eight H.D. Off-Road Vehicles Under	\$140,923.04	Yes
MS11087	Cemex Construction Material Pacific,	10/16/2012	2/15/2016		\$448,766.00	\$448,760.80	Retrofit 13 H.D. Off-Road Vehicles Under Sh	\$5.20	Yes

**Total: 19**

#### Closed/Incomplete Contracts

MS11064	City of Hawthorne	7/28/2012	8/27/2018	8/27/2019	\$175,000.00	\$0.00	New Limited Access CNG Station	\$175,000.00	No
MS11076	SA Recycling, LLC	5/24/2012	9/23/2015		\$424,801.00	\$0.00	Retrofit of 13 Off-Road Diesel Vehicles with	\$424,801.00	No
MS11081	Metropolitan Stevedore Company	9/7/2012	1/6/2016		\$45,416.00	\$0.00	Install DECS on Two Off-Road Vehicles	\$45,416.00	No
MS11082	Baumot North America, LLC	8/2/2012	12/1/2015		\$65,958.00	\$4,350.00	Install DECS on Four Off-Road Vehicles	\$61,608.00	Yes

**Total: 4**

#### Open/Complete Contracts

ML11021	City of Whittier	1/27/2012	9/26/2018	6/26/2019	\$210,000.00	\$210,000.00	Purchase 7 Nat. Gas H.D. Vehicles	\$0.00	Yes
ML11022	City of Anaheim	3/16/2012	7/15/2018		\$150,000.00	\$150,000.00	Purchase of 5 H.D. Vehicles	\$0.00	Yes
ML11023	City of Rancho Cucamonga	4/20/2012	12/19/2018	9/19/2020	\$260,000.00	\$260,000.00	Expand Existing CNG Station, 2 H.D. Vehicl	\$0.00	Yes
ML11025	County of Los Angeles Department o	3/14/2014	9/13/2021		\$150,000.00	\$150,000.00	Purchase 5 Nat. Gas H.D. Vehicles	\$0.00	Yes
ML11026	City of Redlands	3/2/2012	10/1/2018		\$90,000.00	\$90,000.00	Purchase 3 Nat. Gas H.D. Vehicles	\$0.00	Yes
ML11028	City of Glendale	1/13/2012	5/12/2018		\$300,000.00	\$300,000.00	Purchase 10 H.D. CNG Vehicles	\$0.00	Yes



Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML11030	City of Fullerton	2/3/2012	3/2/2018		\$109,200.00	\$109,200.00	Purchase 2 Nat. Gas H.D. Vehicles, Retrofit	\$0.00	Yes
ML11031	City of Culver City Transportation De	12/2/2011	12/1/2018		\$300,000.00	\$300,000.00	Purchase 10 H.D. Nat. Gas Vehicles	\$0.00	Yes
ML11033	City of Los Angeles, Bureau of Sanit	3/16/2012	1/15/2019		\$1,080,000.00	\$1,080,000.00	Purchase 36 LNG H.D. Vehicles	\$0.00	Yes
ML11034	City of Los Angeles, Department of	5/4/2012	1/3/2019		\$630,000.00	\$630,000.00	Purchase 21 H.D. CNG Vehicles	\$0.00	Yes
ML11037	City of Anaheim	12/22/2012	12/21/2019		\$300,000.00	\$300,000.00	Purchase 12 Nat. Gas H.D. Vehicles	\$0.00	Yes
ML11039	City of Ontario, Housing & Municipal	1/27/2012	9/26/2018		\$180,000.00	\$180,000.00	Purchase 6 Nat. Gas H.D. Vehicles	\$0.00	Yes
ML11042	City of Chino	2/17/2012	4/16/2018		\$30,000.00	\$30,000.00	Purchase 1 Nat. Gas H.D. Vehicle, Repower	\$0.00	Yes
ML11043	City of Hemet Public Works	2/3/2012	2/2/2019		\$60,000.00	\$60,000.00	Purchase 2 H.D. Nat. Gas Vehicles	\$0.00	Yes
ML11044	City of Ontario, Housing & Municipal	1/27/2012	6/26/2019		\$400,000.00	\$400,000.00	Expand Existing CNG Station	\$0.00	Yes
MS11008	USA Waste of California, Inc.	10/24/2013	4/23/2020		\$125,000.00	\$125,000.00	Expansion of Existing LCNG Station	\$0.00	Yes
MS11009	USA Waste of California, Inc.	10/24/2013	4/23/2020		\$125,000.00	\$125,000.00	Expansion of Existing LCNG Station	\$0.00	Yes
MS11010	Border Valley Trading	8/26/2011	10/25/2017	4/25/2020	\$150,000.00	\$150,000.00	New LNG Station	\$0.00	Yes
MS11011	EDCO Disposal Corporation	12/30/2011	4/29/2019		\$100,000.00	\$100,000.00	New CNG Station - Signal Hill	\$0.00	Yes
MS11012	EDCO Disposal Corporation	12/30/2011	4/29/2019		\$100,000.00	\$100,000.00	New CNG Station - Buena Park	\$0.00	Yes
MS11016	CR&R Incorporated	4/12/2013	10/11/2019		\$100,000.00	\$100,000.00	New CNG Station - Perris	\$0.00	Yes
MS11017	CR&R, Inc.	3/2/2012	2/1/2018		\$100,000.00	\$100,000.00	Expansion of existing station - Garden Grove	\$0.00	Yes
MS11019	City of Corona	11/29/2012	4/28/2020		\$225,000.00	\$225,000.00	Expansion of Existing CNG Station	\$0.00	Yes
MS11055	KEC Engineering	2/3/2012	8/2/2018	8/2/2019	\$200,000.00	\$200,000.00	Repower 5 H.D. Off-Road Vehicles	\$0.00	Yes
MS11060	Rowland Unified School District	8/17/2012	1/16/2019	1/16/2020	\$175,000.00	\$175,000.00	New Limited Access CNG Station	\$0.00	Yes
MS11066	Torrance Unified School District	11/19/2012	9/18/2018		\$42,296.00	\$42,296.00	Expansion of Existing CNG Station	\$0.00	Yes
MS11067	City of Redlands	5/24/2012	11/23/2018	11/23/2019	\$85,000.00	\$85,000.00	Expansion of Existing CNG Station	\$0.00	Yes
MS11068	Ryder System Inc.	7/28/2012	10/27/2018		\$175,000.00	\$175,000.00	New Public Access L/CNG Station (Fontana)	\$0.00	Yes
MS11069	Ryder System Inc.	7/28/2012	8/27/2018		\$175,000.00	\$175,000.00	New Public Access L/CNG Station (Orange)	\$0.00	Yes
MS11071	City of Torrance Transit Department	12/22/2012	1/21/2019	1/21/2020	\$175,000.00	\$166,250.00	New Limited Access CNG Station	\$8,750.00	Yes
MS11073	Los Angeles Unified School District	9/11/2015	2/10/2022		\$175,000.00	\$175,000.00	Expansion of Existing CNG Station	\$0.00	Yes
MS11079	Bear Valley Unified School District	2/5/2013	10/4/2019		\$175,000.00	\$175,000.00	New Limited Access CNG Station	\$0.00	Yes

**Total: 32**

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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## **FY 2011-2012 Contracts**

### **Open Contracts**

ML12014	City of Santa Ana	11/8/2013	8/7/2020		\$384,000.00	\$4,709.00	9 H.D. Nat. Gas & LPG Trucks, EV Charging	\$379,291.00	No
ML12018	City of West Covina	10/18/2013	10/17/2020	1/17/2022	\$300,000.00	\$0.00	Expansion of Existing CNG Station	\$300,000.00	No
ML12041	City of Anaheim Public Utilities Depa	4/4/2014	11/3/2015	11/3/2017	\$68,977.00	\$0.00	EV Charging Infrastructure	\$68,977.00	No
ML12043	City of Hemet	6/24/2013	9/23/2019		\$60,000.00	\$0.00	Two Heavy-Duty Nat. Gas Vehicles	\$60,000.00	No
ML12045	City of Baldwin Park DPW	2/14/2014	12/13/2020		\$400,000.00	\$0.00	Install New CNG Station	\$400,000.00	No
ML12048	City of La Palma	1/4/2013	11/3/2018		\$20,000.00	\$0.00	Two Medium-Duty LPG Vehicles	\$20,000.00	No
ML12051	City of Bellflower	5/7/2017	2/6/2016	2/6/2018	\$100,000.00	\$0.00	EV Charging Infrastructure	\$100,000.00	No
ML12057	City of Coachella	8/28/2013	8/27/2019	1/27/2022	\$57,456.00	\$10,375.80	Purchase One Nat. Gas H.D. Vehicle/Street	\$47,080.20	No
ML12090	City of Palm Springs	10/9/2015	10/8/2021		\$21,163.00	\$0.00	EV Charging Infrastructure	\$21,163.00	No
MS12008	Bonita Unified School District	7/12/2013	12/11/2019	4/11/2021	\$175,000.00	\$0.00	Construct New Limited-Access CNG Station	\$175,000.00	No
MS12011	Southern California Gas Company	6/14/2013	6/13/2019	5/28/2021	\$150,000.00	\$135,000.00	Construct New Public-Access CNG Station -	\$15,000.00	No
MS12024	Southern California Gas Company	6/13/2013	12/12/2019	11/12/2020	\$150,000.00	\$135,000.00	Construct New Public-Access CNG Station -	\$15,000.00	No
MS12033	Mike Diamond/Phace Management	12/22/2012	12/21/2018	6/21/2021	\$500,000.00	\$134,010.00	Purchase 20 Medium-Heavy Duty Vehicles	\$365,990.00	No
MS12034	Ware Disposal Company, Inc.	11/2/2012	11/1/2018	5/1/2022	\$133,070.00	\$74,763.00	Purchase 8 Medium-Heavy Duty Vehicles	\$58,307.00	No
MS12060	City of Santa Monica	4/4/2014	8/3/2017		\$500,000.00	\$412,584.46	Implement Westside Bikeshare Program	\$87,415.54	No
MS12075	CR&R Incorporated	7/27/2013	1/26/2021	1/26/2022	\$100,000.00	\$0.00	Expansion of Existing CNG Infrastructure	\$100,000.00	No
MS12077	City of Coachella	6/14/2013	6/13/2020		\$225,000.00	\$0.00	Construct New CNG Station	\$225,000.00	No
MS12083	Brea Olinda Unified School District	7/30/2015	2/29/2024		\$59,454.00	\$0.00	Install New CNG Infrastructure	\$59,454.00	No
MS12084	Airport Mobil Inc.	12/6/2013	5/5/2020		\$150,000.00	\$0.00	Install New CNG Infrastructure	\$150,000.00	No
MS12089	Riverside County Transportation Co	10/18/2013	9/17/2015		\$249,136.00	\$105,747.48	Implement Rideshare Incentives Program	\$143,388.52	No
MS12Hom	Mansfield Gas Equipment Systems				\$296,000.00	\$0.00	Home Refueling Apparatus Incentive Progra	\$296,000.00	No

**Total: 21**

### **Declined/Cancelled Contracts**

ML12016	City of Cathedral City	1/4/2013	10/3/2019		\$60,000.00	\$0.00	CNG Vehicle & Electric Vehicle Infrastructur	\$60,000.00	No
ML12038	City of Long Beach Public Works				\$26,000.00	\$0.00	Electric Vehicle Charging Infrastructure	\$26,000.00	No
ML12040	City of Duarte Transit				\$30,000.00	\$0.00	One Heavy-Duty Nat. Gas Vehicle	\$30,000.00	No
ML12044	County of San Bernardino Public Wo				\$250,000.00	\$0.00	Install New CNG Station	\$250,000.00	No
ML12052	City of Whittier	3/14/2013	7/13/2019		\$165,000.00	\$0.00	Expansion of Existing CNG Station	\$165,000.00	No
ML12053	City of Mission Viejo				\$60,000.00	\$0.00	EV Charging Infrastructure	\$60,000.00	No
MS12007	WestAir Gases & Equipment				\$100,000.00	\$0.00	Construct New Limited-Access CNG Station	\$100,000.00	No
MS12027	C.V. Ice Company, Inc.	5/17/2013	11/16/2019		\$75,000.00	\$0.00	Purchase 3 Medium-Heavy Duty Vehicles	\$75,000.00	No
MS12030	Complete Landscape Care, Inc.				\$150,000.00	\$0.00	Purchase 6 Medium-Heavy Duty Vehicles	\$150,000.00	No
MS12067	Leatherwood Construction, Inc.	11/8/2013	3/7/2017		\$122,719.00	\$0.00	Retrofit Six Vehicles w/DECS - Showcase III	\$122,719.00	No
MS12070	Valley Music Travel/CID Entertainme				\$99,000.00	\$0.00	Implement Shuttle Service to Coachella Mus	\$99,000.00	No

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
Total: 11									
<b>Closed Contracts</b>									
ML12013	City of Pasadena	10/19/2012	3/18/2015	9/18/2015	\$200,000.00	\$65,065.00	Electric Vehicle Charging Infrastructure	\$134,935.00	Yes
ML12019	City of Palm Springs	9/6/2013	7/5/2015		\$38,000.00	\$16,837.00	EV Charging Infrastructure	\$21,163.00	Yes
ML12021	City of Rancho Cucamonga	9/14/2012	1/13/2020		\$40,000.00	\$40,000.00	Four Medium-Duty Nat. Gas Vehicles	\$0.00	Yes
ML12023	County of Los Angeles Internal Servi	8/1/2013	2/28/2015		\$250,000.00	\$192,333.00	EV Charging Infrastructure	\$57,667.00	Yes
ML12037	Coachella Valley Association of Gov	3/14/2013	3/13/2014		\$250,000.00	\$250,000.00	Street Sweeping Operations	\$0.00	Yes
ML12042	City of Chino Hills	1/18/2013	3/17/2017		\$87,500.00	\$87,500.00	Expansion of Existing CNG Station	\$0.00	Yes
ML12049	City of Rialto Public Works	7/14/2014	9/13/2015		\$30,432.00	\$3,265.29	EV Charging Infrastructure	\$27,166.71	Yes
ML12050	City of Baldwin Park	4/25/2013	4/24/2014	10/24/2014	\$402,400.00	\$385,363.00	EV Charging Infrastructure	\$17,037.00	Yes
ML12054	City of Palm Desert	9/30/2013	2/28/2015		\$77,385.00	\$77,385.00	EV Charging Infrastructure	\$0.00	Yes
ML12056	City of Cathedral City	3/26/2013	5/25/2014		\$25,000.00	\$25,000.00	Regional Street Sweeping Program	\$0.00	Yes
ML12066	City of Manhattan Beach	1/7/2014	4/6/2015		\$5,900.00	\$5,900.00	Electric Vehicle Charging Infrastructure	\$0.00	Yes
MS12001	Los Angeles County MTA	7/1/2012	4/30/2013		\$300,000.00	\$211,170.00	Clean Fuel Transit Service to Dodger Stadiu	\$88,830.00	Yes
MS12002	Orange County Transportation Autho	9/7/2012	4/30/2013		\$342,340.00	\$333,185.13	Express Bus Service to Orange County Fair	\$9,154.87	Yes
MS12003	Orange County Transportation Autho	7/20/2012	2/28/2013		\$234,669.00	\$167,665.12	Implement Metrolink Service to Angel Stadiu	\$67,003.88	Yes
MS12005	USA Waste of California, Inc.	10/19/2012	8/18/2013		\$75,000.00	\$75,000.00	Vehicle Maintenance Facility Modifications	\$0.00	Yes
MS12006	Waste Management Collection & Re	10/19/2012	8/18/2013		\$75,000.00	\$75,000.00	Vehicle Maintenance Facility Modifications	\$0.00	Yes
MS12012	Rim of the World Unified School Dist	12/20/2012	5/19/2014		\$75,000.00	\$75,000.00	Vehicle Maintenance Facility Modifications	\$0.00	Yes
MS12059	Orange County Transportation Autho	2/28/2013	12/27/2014		\$75,000.00	\$75,000.00	Maintenance Facilities Modifications	\$0.00	Yes
MS12061	Orange County Transportation Autho	3/14/2014	3/13/2017		\$224,000.00	\$114,240.00	Transit-Oriented Bicycle Sharing Program	\$109,760.00	Yes
MS12062	Fraser Communications	12/7/2012	5/31/2014		\$998,669.00	\$989,218.49	Develop & Implement "Rideshare Thursday"	\$9,450.51	Yes
MS12064	Anaheim Transportation Network	3/26/2013	12/31/2014		\$127,296.00	\$56,443.92	Implement Anaheim Circulator Service	\$70,852.08	Yes
MS12065	Orange County Transportation Autho	7/27/2013	11/30/2013		\$43,933.00	\$14,832.93	Ducks Express Service to Honda Center	\$29,100.07	Yes
MS12068	Southern California Regional Rail Au	3/1/2013	9/30/2013		\$57,363.00	\$47,587.10	Implement Metrolink Service to Autoclub Sp	\$9,775.90	Yes
MS12069	City of Irvine	8/11/2013	2/28/2014		\$45,000.00	\$26,649.41	Implement Special Transit Service to Solar	\$18,350.59	Yes
MS12076	City of Ontario, Housing & Municipal	3/8/2013	4/7/2015		\$75,000.00	\$75,000.00	Maintenance Facilities Modification	\$0.00	Yes
MS12078	Penske Truck Leasing Co., L.P.	1/7/2014	1/6/2016		\$75,000.00	\$73,107.00	Maintenance Facility Modifications - Vernon	\$1,893.00	Yes
MS12081	Penske Truck Leasing Co., L.P.	1/7/2014	1/6/2016		\$75,000.00	\$75,000.00	Maintenance Facility Modifications - Santa A	\$0.00	Yes
MS12085	Bear Valley Unified School District	4/25/2013	6/24/2014		\$75,000.00	\$75,000.00	Maintenance Facility Modifications	\$0.00	Yes
MS12087	Los Angeles County MTA	8/29/2013	11/28/2015		\$125,000.00	\$125,000.00	Implement Rideshare Incentives Program	\$0.00	Yes
MS12088	Orange County Transportation Autho	12/6/2013	3/5/2016		\$125,000.00	\$18,496.50	Implement Rideshare Incentives Program	\$106,503.50	Yes
Total: 30									
<b>Closed/Incomplete Contracts</b>									
MS12079	Penske Truck Leasing Co., L.P.	1/7/2014	1/6/2016		\$75,000.00	\$0.00	Maintenance Facility Modifications - Boyle H	\$75,000.00	No
Total: 1									
<b>Open/Complete Contracts</b>									

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML12015	City of Fullerton	4/25/2013	11/24/2020	11/24/2021	\$40,000.00	\$40,000.00	HD CNG Vehicle, Expand CNG Station	\$0.00	Yes
ML12017	City of Los Angeles, Bureau of Sanit	6/26/2013	5/25/2020	11/25/2021	\$950,000.00	\$950,000.00	32 H.D. Nat. Gas Vehicles	\$0.00	Yes
ML12020	City of Los Angeles, Department of	9/27/2012	3/26/2019	3/26/2020	\$450,000.00	\$450,000.00	15 H.D. Nat. Gas Vehicles	\$0.00	Yes
ML12022	City of La Puente	12/6/2013	6/5/2020		\$110,000.00	\$110,000.00	2 Medium-Duty and Three Heavy-Duty CNG	\$0.00	Yes
ML12039	City of Redlands	2/8/2013	10/7/2019		\$90,000.00	\$90,000.00	Three Heavy-Duty Nat. Gas Vehicles	\$0.00	Yes
ML12046	City of Irvine	8/11/2013	3/10/2021		\$30,000.00	\$30,000.00	One Heavy-Duty Nat. Gas Vehicle	\$0.00	Yes
ML12047	City of Orange	2/1/2013	1/31/2019		\$30,000.00	\$30,000.00	One Heavy-Duty Nat. Gas Vehicle	\$0.00	Yes
ML12055	City of Manhattan Beach	3/1/2013	12/31/2018		\$10,000.00	\$10,000.00	One Medium-Duty Nat. Gas Vehicle	\$0.00	Yes
MS12004	USA Waste of California, Inc.	10/24/2013	11/23/2019		\$175,000.00	\$175,000.00	Construct New Limited-Access CNG Station	\$0.00	Yes
MS12009	Sysco Food Services of Los Angeles	1/7/2014	4/6/2020		\$150,000.00	\$150,000.00	Construct New Public-Access LNG Station	\$0.00	Yes
MS12010	Murrieta Valley Unified School Distric	4/5/2013	9/4/2019		\$242,786.00	\$242,786.00	Construct New Limited-Access CNG Station	\$0.00	Yes
MS12025	Silverado Stages, Inc.	11/2/2012	7/1/2018		\$150,000.00	\$150,000.00	Purchase Six Medium-Heavy Duty Vehicles	\$0.00	Yes
MS12026	U-Haul Company of California	3/14/2013	3/13/2019		\$500,000.00	\$353,048.26	Purchase 23 Medium-Heavy Duty Vehicles	\$146,951.74	Yes
MS12028	Dy-Dee Service of Pasadena, Inc.	12/22/2012	1/21/2019		\$45,000.00	\$40,000.00	Purchase 2 Medium-Duty and 1 Medium-He	\$5,000.00	Yes
MS12029	Community Action Partnership of Or	11/2/2012	11/1/2018		\$25,000.00	\$14,850.00	Purchase 1 Medium-Heavy Duty Vehicle	\$10,150.00	Yes
MS12031	Final Assembly, Inc.	11/2/2012	11/1/2018		\$50,000.00	\$32,446.00	Purchase 2 Medium-Heavy Duty Vehicles	\$17,554.00	Yes
MS12032	Fox Transportation	12/14/2012	12/13/2018		\$500,000.00	\$500,000.00	Purchase 20 Medium-Heavy Duty Vehicles	\$0.00	Yes
MS12035	Disneyland Resort	1/4/2013	7/3/2019		\$25,000.00	\$18,900.00	Purchase 1 Medium-Heavy Duty Vehicle	\$6,100.00	Yes
MS12036	Jim & Doug Carter's Automotive/VS	1/4/2013	11/3/2018		\$50,000.00	\$50,000.00	Purchase 2 Medium-Heavy Duty Vehicles	\$0.00	Yes
MS12058	Krisda Inc	4/24/2013	1/23/2019		\$25,000.00	\$25,000.00	Repower One Heavy-Duty Off-Road Vehicle	\$0.00	Yes
MS12063	Custom Alloy Light Metals, Inc.	8/16/2013	2/15/2020		\$100,000.00	\$100,000.00	Install New Limited Access CNG Station	\$0.00	Yes
MS12071	Transit Systems Unlimited, Inc.	5/17/2013	12/16/2018		\$21,250.00	\$21,250.00	Expansion of Existing CNG Station	\$0.00	Yes
MS12072	99 Cents Only Stores	4/5/2013	9/4/2019		\$100,000.00	\$100,000.00	Construct New CNG Station	\$0.00	Yes
MS12073	FirstCNG, LLC	7/27/2013	12/26/2019		\$150,000.00	\$150,000.00	Construct New CNG Station	\$0.00	Yes
MS12074	Arcadia Unified School District	7/5/2013	9/4/2019		\$175,000.00	\$175,000.00	Expansion of Existing CNG Infrastructure	\$0.00	Yes
MS12080	City of Pasadena	11/8/2013	8/7/2020	2/7/2022	\$225,000.00	\$225,000.00	Expansion of Existing CNG Infrastructure	\$0.00	Yes
MS12082	City of Los Angeles, Bureau of Sanit	11/20/2013	2/19/2021		\$175,000.00	\$175,000.00	Install New CNG Infrastructure	\$0.00	Yes
MS12086	SuperShuttle International, Inc.	3/26/2013	3/25/2019		\$225,000.00	\$225,000.00	Purchase 23 Medium-Heavy Duty Vehicles	\$0.00	Yes

**Total: 28**

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
<b>FY 2012-2014 Contracts</b>									
<b>Open Contracts</b>									
ML14012	City of Santa Ana	2/13/2015	10/12/2021		\$244,000.00	\$0.00	EV Charging and 7 H.D. LPG Vehicles	\$244,000.00	No
ML14013	City of Los Angeles, Bureau of Sanit	10/7/2016	2/6/2025		\$400,000.00	\$0.00	Purchase 14 H.D. Nat. Gas Vehicles	\$400,000.00	No
ML14016	City of Anaheim	4/3/2015	9/2/2021		\$380,000.00	\$0.00	Purchase 2 H.D. Vehicles, Expansion of Exi	\$380,000.00	No
ML14018	City of Los Angeles, Department of	3/6/2015	9/5/2021	12/5/2022	\$810,000.00	\$720,000.00	Purchase 27 H.D. Nat. Gas Vehicles	\$90,000.00	No
ML14019	City of Corona Public Works	12/5/2014	6/4/2020	6/4/2022	\$178,263.00	\$0.00	EV Charging, Bicycle Racks, Bicycle Locker	\$178,263.00	No
ML14021	Riverside County Regional Park and	7/24/2014	12/23/2016	9/23/2018	\$250,000.00	\$0.00	Bicycle Trail Improvements	\$250,000.00	No
ML14022	County of Los Angeles Department o	10/2/2015	5/1/2022		\$270,000.00	\$0.00	Purchase 9 H.D. Nat. Gas Vehicles	\$270,000.00	No
ML14023	County of Los Angeles Department o	10/2/2015	9/1/2017		\$230,000.00	\$0.00	Maintenance Fac. Modifications-Westcheste	\$230,000.00	No
ML14024	County of Los Angeles Department o	10/2/2015	9/1/2017		\$230,000.00	\$0.00	Maintenance Fac. Modifications-Baldwin Par	\$230,000.00	No
ML14025	County of Los Angeles Dept of Publi	10/2/2015	7/1/2018		\$300,000.00	\$0.00	Construct New CNG Station in Malibu	\$300,000.00	No
ML14026	County of Los Angeles Dept of Publi	10/2/2015	5/1/2023		\$300,000.00	\$0.00	Construct New CNG Station in Castaic	\$300,000.00	No
ML14027	County of Los Angeles Dept of Publi	10/2/2015	5/1/2023	6/1/2024	\$500,000.00	\$0.00	Construct New CNG Station in Canyon Coun	\$500,000.00	No
ML14028	City of Fullerton	9/5/2014	1/4/2022		\$126,950.00	\$0.00	Expansion of Exisiting CNG Infrastructure	\$126,950.00	No
ML14030	County of Los Angeles Internal Servi	1/9/2015	3/8/2018	6/8/2019	\$425,000.00	\$0.00	Bicycle Racks, Outreach & Education	\$425,000.00	No
ML14033	City of Irvine	7/11/2014	2/10/2021		\$60,000.00	\$0.00	Purchase 2 H.D. CNG Vehicles	\$60,000.00	No
ML14049	City of Moreno Valley	7/11/2014	3/10/2021		\$105,000.00	\$30,000.00	One HD Nat Gas Vehicle, EV Charging, Bicy	\$75,000.00	No
ML14051	City of Brea	9/5/2014	1/4/2017	7/4/2018	\$450,000.00	\$0.00	Installation of Bicycle Trail	\$450,000.00	No
ML14054	City of Torrance	11/14/2014	4/13/2017	7/13/2017	\$350,000.00	\$0.00	Upgrade Maintenance Facility	\$350,000.00	No
ML14055	City of Highland	10/10/2014	3/9/2018		\$500,000.00	\$0.00	Bicycle Lanes and Outreach	\$500,000.00	No
ML14056	City of Redlands	9/5/2014	5/4/2016	5/4/2018	\$125,000.00	\$0.00	Bicycle Lanes	\$125,000.00	No
ML14062	City of San Fernando	3/27/2015	5/26/2021		\$387,091.00	\$0.00	Expand Existing CNG Fueling Station	\$387,091.00	No
ML14066	City of South Pasadena	9/12/2014	7/11/2016	7/11/2017	\$142,096.00	\$0.00	Bicycle Trail Improvements	\$142,096.00	No
ML14067	City of Duarte Transit	12/4/2015	1/3/2023		\$60,000.00	\$0.00	Purchase Two Heavy-Duty Nat. Gas Vehicle	\$60,000.00	No
ML14068	City of South Pasadena	9/12/2014	10/11/2015	1/11/2020	\$10,183.00	\$0.00	Electric Vehicle Charging Infrastructure	\$10,183.00	No
ML14069	City of Beaumont	3/3/2017	3/2/2025		\$200,000.00	\$0.00	Construct New CNG Infrastructure	\$200,000.00	No
ML14070	City of Rancho Cucamonga	9/3/2016	12/2/2018		\$365,245.00	\$0.00	Bicycle Trail Improvements	\$365,245.00	No
ML14071	City of Manhattan Beach	1/9/2015	11/8/2018		\$22,485.00	\$0.00	Electric Vehicle Charging Infrastructure	\$22,485.00	No
ML14072	City of Cathedral City	8/13/2014	1/12/2021		\$136,000.00	\$0.00	Medium & H.D. Vehicles, EV Charging, Bike	\$136,000.00	No
ML14093	County of Los Angeles Dept of Publi	8/14/2015	1/13/2019		\$150,000.00	\$0.00	San Gabriel BikeTrail Underpass Improveme	\$150,000.00	No
MS14001	Los Angeles County MTA	3/6/2015	4/30/2015		\$1,216,637.00	\$0.00	Clean Fuel Transit Service to Dodger Stadiu	\$1,216,637.00	No
MS14037	Penske Truck Leasing Co., L.P.	4/7/2017	6/6/2020		\$75,000.00	\$0.00	Vehicle Maint. Fac. Modifications - Carson	\$75,000.00	No
MS14053	Upland Unified School District	1/9/2015	7/8/2021		\$175,000.00	\$166,250.00	Expansion of Existing CNG Infrastructure	\$8,750.00	No
MS14057	Los Angeles County MTA	11/7/2014	10/6/2019		\$1,250,000.00	\$0.00	Implement Various Signal Synchronization P	\$1,250,000.00	No
MS14058	Orange County Transportation Autho	11/7/2014	4/6/2016	4/6/2017	\$1,250,000.00	\$0.00	Implement Various Signal Synchronization P	\$1,250,000.00	No

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
MS14059	Riverside County Transportation Co	9/5/2014	3/4/2018		\$1,250,000.00	\$0.00	Implement Various Signal Synchronization P	\$1,250,000.00	No
MS14072	San Bernardino County Transportatio	3/27/2015	3/26/2018		\$1,250,000.00	\$0.00	Implement Various Signal Synchronization P	\$1,250,000.00	No
MS14075	Fullerton Joint Union High School Di	7/22/2016	11/21/2023		\$300,000.00	\$0.00	Expansion of Existing CNG Infrastructure/Ma	\$300,000.00	No
MS14076	Rialto Unified School District	6/17/2015	2/16/2022		\$225,000.00	\$0.00	New Public Access CNG Station	\$225,000.00	No
MS14078	American Honda Motor Co., Inc.	9/4/2015	8/3/2022		\$150,000.00	\$0.00	New Public Access CNG Station	\$150,000.00	No
MS14079	Waste Resources, Inc.	9/14/2016	8/13/2022		\$100,000.00	\$0.00	New Limited Access CNG Station	\$100,000.00	No
MS14080	CR&R Incorporated	6/1/2015	8/31/2021	8/31/2022	\$200,000.00	\$0.00	Expansion of Existing CNG Infrastructure/Ma	\$200,000.00	No
MS14081	CR&R Incorporated	6/1/2015	5/30/2021		\$175,000.00	\$90,000.00	Expansion of Existing CNG Infrastructure/Ma	\$85,000.00	No
MS14082	Grand Central Recycling & Transfer	12/4/2015	3/3/2023		\$150,000.00	\$0.00	Construct New Public Access CNG Station	\$150,000.00	No
MS14083	Hacienda La Puente Unified School	7/10/2015	3/9/2022		\$175,000.00	\$0.00	New Limited Access CNG Station	\$175,000.00	No
MS14089	Top Shelf Consulting, LLC	1/18/2017	8/4/2016	3/31/2017	\$200,000.00	\$200,000.00	Enhanced Fleet Modernization Program	\$0.00	Yes
MS14092	West Covina Unified School District	9/3/2016	12/2/2022		\$124,000.00	\$0.00	Expansion of Existing CNG Infrastructure	\$124,000.00	No

**Total: 46**

#### Pending Execution Contracts

ML14060	County of Los Angeles Internal Servi				\$104,400.00	\$0.00	Electric Vehicle Charging Infrastructure	\$104,400.00	No
ML14094	City of Yucaipa				\$84,795.00	\$0.00	Installation of Bicycle Lanes	\$84,795.00	No
MS14038	Penske Truck Leasing Co., L.P.				\$75,000.00	\$0.00	Vehicle Maint. Fac. Modifications - Fontana	\$75,000.00	No
MS14085	Prologis, L.P.				\$100,000.00	\$0.00	New Limited Access CNG Station	\$100,000.00	No

**Total: 4**

#### Declined/Cancelled Contracts

ML14050	City of Yucaipa	7/11/2014	9/10/2015	7/1/2016	\$84,795.00	\$0.00	Installation of Bicycle Lanes	\$84,795.00	No
ML14063	City of Hawthorne				\$32,000.00	\$0.00	Expansion of Existng CNG Infrastructure	\$32,000.00	No
MS14035	Penske Truck Leasing Co., L.P.				\$75,000.00	\$0.00	Vehicle Maint. Fac. Modifications - Sun Valle	\$75,000.00	No
MS14036	Penske Truck Leasing Co., L.P.				\$75,000.00	\$0.00	Vehicle Maint. Fac. Modifications - La Mirad	\$75,000.00	No
MS14043	City of Anaheim				\$175,000.00	\$0.00	Expansion of Existing CNG Station	\$175,000.00	No
MS14086	San Gabriel Valley Towing I				\$150,000.00	\$0.00	New Public Access CNG Station	\$150,000.00	No
MS14091	Serv-Wel Disposal				\$100,000.00	\$0.00	New Limited-Access CNG Infrastructure	\$100,000.00	No

**Total: 7**

#### Closed Contracts

ML14010	City of Cathedral City	8/13/2014	10/12/2015		\$25,000.00	\$25,000.00	Street Sweeping Operations	\$0.00	Yes
ML14011	City of Palm Springs	6/13/2014	1/12/2016		\$79,000.00	\$78,627.00	Bicycle Racks, Bicycle Outreach & Educatio	\$373.00	Yes
ML14015	Coachella Valley Association of Gov	6/6/2014	9/5/2015		\$250,000.00	\$250,000.00	Street Sweeping Operations	\$0.00	Yes
ML14020	County of Los Angeles Dept of Publi	8/13/2014	1/12/2018		\$150,000.00	\$0.00	San Gabriel BikeTrail Underpass Improveme	\$150,000.00	No
ML14065	City of Orange	9/5/2014	8/4/2015		\$10,000.00	\$10,000.00	Electric Vehicle Charging Infrastructure	\$0.00	Yes
MS14002	Orange County Transportation Autho	9/6/2013	4/30/2014		\$576,833.00	\$576,833.00	Clean Fuel Transit Service to Orange Count	\$0.00	Yes
MS14003	Orange County Transportation Autho	8/1/2013	4/30/2014	10/30/2014	\$194,235.00	\$184,523.00	Implement Metrolink Service to Angel Stadiu	\$9,712.00	Yes
MS14004	Orange County Transportation Autho	9/24/2013	4/30/2014		\$36,800.00	\$35,485.23	Implement Express Bus Service to Solar De	\$1,314.77	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
MS14005	Transit Systems Unlimited, Inc.	4/11/2014	2/28/2016		\$515,200.00	\$511,520.00	Provide Expanded Shuttle Service to Hollyw	\$3,680.00	Yes
MS14007	Orange County Transportation Autho	6/6/2014	4/30/2015		\$208,520.00	\$189,622.94	Implement Special Metrolink Service to Ang	\$18,897.06	Yes
MS14008	Orange County Transportation Autho	8/13/2014	5/31/2015		\$601,187.00	\$601,187.00	Implement Clean Fuel Bus Service to Orang	\$0.00	Yes
MS14009	A-Z Bus Sales, Inc.	1/17/2014	12/31/2014	3/31/2015	\$388,000.00	\$388,000.00	Alternative Fuel School Bus Incentive Progra	\$0.00	Yes
MS14039	Waste Management Collection and	7/10/2015	4/9/2016		\$75,000.00	\$75,000.00	Vehicle Maint. Fac. Modifications - Irvine	\$0.00	Yes
MS14040	Waste Management Collection and	7/10/2015	4/9/2016		\$75,000.00	\$75,000.00	Vehicle Maint. Fac. Modifications - Santa An	\$0.00	Yes
MS14047	Southern California Regional Rail Au	3/7/2014	9/30/2014		\$49,203.00	\$32,067.04	Special Metrolink Service to Autoclub Speed	\$17,135.96	Yes
MS14048	BusWest	3/14/2014	12/31/2014	5/31/2015	\$940,850.00	\$847,850.00	Alternative Fuel School Bus Incentive Progra	\$93,000.00	Yes
MS14073	Anaheim Transportation Network	1/9/2015	4/30/2017		\$221,312.00	\$221,312.00	Anaheim Resort Circulator Service	\$0.00	Yes
MS14087	Orange County Transportation Autho	8/14/2015	4/30/2016		\$239,645.00	\$195,377.88	Implement Special Metrolink Service to Ang	\$44,267.12	Yes
MS14088	Southern California Regional Rail Au	5/7/2015	9/30/2015		\$79,660.00	\$66,351.44	Special Metrolink Service to Autoclub Speed	\$13,308.56	Yes

**Total: 19**

<b>Open/Complete Contracts</b>									
ML14014	City of Torrance	9/5/2014	12/4/2019		\$56,000.00	\$56,000.00	EV Charging Infrastructure	\$0.00	Yes
ML14029	City of Irvine	7/11/2014	6/10/2017		\$90,500.00	\$71,056.78	Bicycle Trail Improvements	\$19,443.22	Yes
ML14031	Riverside County Waste Manageme	6/13/2014	12/12/2020		\$90,000.00	\$90,000.00	Purchase 3 H.D. CNG Vehicles	\$0.00	Yes
ML14032	City of Rancho Cucamonga	1/9/2015	1/8/2022		\$113,990.00	\$104,350.63	Expansion of Existing CNG Infrast., Bicycle L	\$9,639.37	Yes
ML14034	City of Lake Elsinore	9/5/2014	5/4/2021		\$56,700.00	\$56,700.00	EV Charging Stations	\$0.00	Yes
ML14061	City of La Habra	3/11/2016	3/10/2022		\$41,600.00	\$41,270.49	Purchase Two Heavy-Duty Nat. Gas Vehicle	\$329.51	Yes
ML14064	City of Claremont	7/11/2014	7/10/2020	1/10/2021	\$60,000.00	\$60,000.00	Purchase Two Heavy-Duty Nat. Gas Vehicle	\$0.00	Yes
MS14041	USA Waste of California, Inc.	9/4/2015	10/3/2021		\$175,000.00	\$175,000.00	Limited-Access CNG Station, Vehicle Maint.	\$0.00	Yes
MS14042	Grand Central Recycling & Transfer	6/6/2014	9/5/2021		\$150,000.00	\$150,000.00	Expansion of Existing CNG Station	\$0.00	Yes
MS14044	TIMCO CNG Fund I, LLC	5/2/2014	11/1/2020		\$150,000.00	\$150,000.00	New Public-Access CNG Station in Santa A	\$0.00	Yes
MS14045	TIMCO CNG Fund I, LLC	6/6/2014	12/5/2020		\$150,000.00	\$150,000.00	New Public-Access CNG Station in Inglewoo	\$0.00	Yes
MS14046	Ontario CNG Station Inc.	5/15/2014	5/14/2020	11/14/2021	\$150,000.00	\$150,000.00	Expansion of Existing CNG Infrastructure	\$0.00	Yes
MS14052	Arcadia Unified School District	6/13/2014	10/12/2020		\$78,000.00	\$78,000.00	Expansion of an Existing CNG Fueling Statio	\$0.00	Yes
MS14074	Midway City Sanitary District	1/9/2015	3/8/2021		\$250,000.00	\$250,000.00	Limited-Access CNG Station & Facility Modif	\$0.00	Yes
MS14077	County Sanitation Districts of L.A. Co	3/6/2015	5/5/2021		\$175,000.00	\$175,000.00	New Limited Access CNG Station	\$0.00	Yes
MS14084	US Air Conditioning Distributors	5/7/2015	9/6/2021		\$100,000.00	\$100,000.00	Expansion of Existing CNG Infrastructure	\$0.00	Yes
MS14090	City of Monterey Park	5/7/2015	5/6/2021		\$225,000.00	\$225,000.00	Expansion of Existing CNG Infrastructure	\$0.00	Yes

**Total: 17**



Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
<b>FY 2014-2016 Contracts</b>									
<b>Open Contracts</b>									
ML16005	City of Palm Springs	3/4/2016	10/3/2017		\$40,000.00	\$0.00	Install Bicycle Racks, and Implement Bicycl	\$40,000.00	No
ML16006	City of Cathedral City	4/27/2016	4/26/2022		\$55,000.00	\$0.00	Purchase 1 H.D. Nat. Gas Vehicle, Bicycle	\$55,000.00	No
ML16007	City of Culver City Transportation De	10/6/2015	4/5/2023		\$246,000.00	\$0.00	Purchase 7 H.D. Nat. Gas Vehicles, EV Cha	\$246,000.00	No
ML16008	City of Pomona	9/20/2016	11/19/2022		\$310,000.00	\$0.00	Purchase 4 Medium-Duty and 9 Heavy-Duty	\$310,000.00	No
ML16009	City of Fountain Valley	10/6/2015	2/5/2018		\$46,100.00	\$0.00	Install EV Charging Infrastructure	\$46,100.00	No
ML16010	City of Fullerton	10/7/2016	4/6/2023		\$370,500.00	\$0.00	Expand Existing CNG Station, EV Charging I	\$370,500.00	No
ML16011	City of Claremont	10/6/2015	6/5/2022		\$90,000.00	\$0.00	Purchase 3 Heavy-Duty Nat. Gas Vehicles	\$90,000.00	No
ML16012	City of Carson	1/15/2016	10/14/2022		\$60,000.00	\$60,000.00	Purchase 2 Heavy-Duty Nat. Gas Vehicles	\$0.00	No
ML16013	City of Monterey Park	12/4/2015	7/3/2022		\$90,000.00	\$0.00	Purchase 3 Heavy-Duty Nat. Gas Vehicles	\$90,000.00	No
ML16015	City of Yorba Linda	3/4/2016	11/3/2017		\$85,000.00	\$0.00	Install Bicycle Lanes	\$85,000.00	No
ML16016	City of Los Angeles, Department of	2/5/2016	12/4/2022		\$630,000.00	\$0.00	Purchase 21 Heavy-Duty Nat. Gas Vehicles	\$630,000.00	No
ML16017	City of Long Beach	2/5/2016	8/4/2023		\$1,445,400.00	\$229,642.73	Purchase 48 Medium-Duty, 16 H.D. Nat. Ga	\$1,215,757.27	No
ML16018	City of Hermosa Beach	10/7/2016	1/6/2023		\$29,520.00	\$0.00	Purchase 2 M.D. Nat. Gas Vehicles, Bicycle	\$29,520.00	No
ML16019	City of Los Angeles, Dept of General	1/25/2017	3/24/2020		\$102,955.00	\$0.00	Install EV Charging Infrastructure	\$102,955.00	No
ML16020	City of Pomona	4/1/2016	2/1/2018		\$440,000.00	\$0.00	Install Road Surface Bicycle Detection Syste	\$440,000.00	No
ML16021	City of Santa Clarita	10/7/2016	6/6/2024		\$49,400.00	\$0.00	Install EV Charging Infrastructure	\$49,400.00	No
ML16023	City of Banning	12/11/2015	12/10/2021		\$30,000.00	\$0.00	Purchase 1 H.D. Nat. Gas Vehicle	\$30,000.00	No
ML16024	City of Azusa	4/27/2016	2/26/2022		\$30,000.00	\$30,000.00	Purchase 1 H.D. Nat. Gas Vehicle	\$0.00	No
ML16025	City of South Pasadena	6/22/2016	4/21/2023		\$180,535.00	\$0.00	Purchase 2 H.D. Nat. Gas Vehicles, Expand	\$180,535.00	No
ML16026	City of Downey	5/6/2016	9/5/2017		\$40,000.00	\$0.00	Install EV Charging Infrastructure	\$40,000.00	No
ML16028	City of Azusa	9/9/2016	4/8/2018		\$25,000.00	\$0.00	Enhance Existing Class 1 Bikeway	\$25,000.00	No
ML16032	City of Azusa	9/9/2016	4/8/2019		\$474,925.00	\$0.00	Implement a "Complete Streets" Pedestrian	\$474,925.00	No
ML16033	Coachella Valley Association of Gov	4/27/2016	4/26/2018		\$250,000.00	\$0.00	Street Sweeping Operations in Coachella Va	\$250,000.00	No
ML16034	City of Riverside	3/11/2016	10/10/2018		\$500,000.00	\$0.00	Implement a "Complete Streets" Pedestrian	\$500,000.00	No
ML16035	City of Wildomar	4/1/2016	11/1/2017		\$500,000.00	\$0.00	Install Bicycle Lanes	\$500,000.00	No
ML16036	City of Brea	3/4/2016	12/3/2018		\$500,000.00	\$0.00	Install a Class 1 Bikeway	\$500,000.00	No
ML16038	City of Palm Springs	4/1/2016	7/31/2022		\$230,000.00	\$0.00	Install Bicycle Lanes & Purchase 4 Heavy-D	\$230,000.00	No
ML16039	City of Torrance Transit Department	1/6/2017	9/5/2022		\$32,000.00	\$0.00	Install EV Charging Infrastructure	\$32,000.00	No
ML16040	City of Eastvale	1/6/2017	7/5/2022		\$110,000.00	\$0.00	Install EV Charging Infrastructure	\$110,000.00	No
ML16041	City of Moreno Valley	9/3/2016	1/21/2021		\$20,000.00	\$0.00	Install EV Charging Infrastructure	\$20,000.00	No
ML16042	City of San Dimas	4/1/2016	12/31/2019		\$55,000.00	\$0.00	Install EV Charging Infrastructure	\$55,000.00	No
ML16045	City of Anaheim	6/22/2016	8/21/2019		\$275,000.00	\$0.00	Maintenance Facility Modifications	\$275,000.00	No
ML16046	City of El Monte	4/1/2016	5/31/2021		\$20,160.00	\$0.00	Install EV Charging Infrastructure	\$20,160.00	No
ML16047	City of Fontana	1/6/2017	8/5/2019		\$500,000.00	\$0.00	Enhance an Existing Class 1 Bikeway	\$500,000.00	No



Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML16048	City of Placentia	3/26/2016	5/25/2021	6/25/2022	\$90,000.00	\$18,655.00	Install a Bicycle Locker and EV Charging Infr	\$71,345.00	No
ML16049	City of Buena Park	4/1/2016	11/30/2018		\$429,262.00	\$0.00	Installation of a Class 1 Bikeway	\$429,262.00	No
ML16050	City of Westminster	5/6/2016	7/5/2020		\$115,000.00	\$0.00	Installation of EV Charging Infrastructure	\$115,000.00	No
ML16051	City of South Pasadena	2/12/2016	1/11/2017	12/11/2017	\$320,000.00	\$0.00	Implement "Open Streets" Event with Variou	\$320,000.00	No
ML16052	City of Rancho Cucamonga	9/3/2016	11/2/2019		\$315,576.00	\$0.00	Install Two Class 1 Bikeways	\$315,576.00	No
ML16053	City of Claremont	3/11/2016	7/10/2018		\$498,750.00	\$0.00	Implement a "Complete Streets" Pedestrian	\$498,750.00	No
ML16054	City of Yucaipa	3/26/2016	7/26/2018		\$120,000.00	\$0.00	Implement a "Complete Streets" Pedestrian	\$120,000.00	No
ML16056	City of Ontario	3/23/2016	9/22/2020		\$150,000.00	\$0.00	Expansion of an Existing CNG Station	\$150,000.00	No
ML16057	City of Yucaipa	4/27/2016	1/26/2019		\$380,000.00	\$0.00	Implement a "Complete Streets" Pedestrian	\$380,000.00	No
ML16058	Los Angeles County Department of P	10/7/2016	4/6/2024		\$491,898.00	\$0.00	Purchase 15 H.D. Nat. Gas Vehicles and Ins	\$491,898.00	No
ML16059	City of Burbank	4/1/2016	2/28/2022		\$180,000.00	\$0.00	Purchase 6 H.D. Nat. Gas Vehicles	\$180,000.00	No
ML16060	City of Cudahy	2/5/2016	10/4/2017		\$73,910.00	\$0.00	Implement an "Open Streets" Event	\$73,910.00	No
ML16062	City of Colton, Electric Department	6/3/2016	7/2/2020		\$25,000.00	\$0.00	Installation of EV Charging Infrastructure	\$25,000.00	No
ML16064	County of Orange, OC Parks	2/21/2017	10/20/2018		\$204,073.00	\$0.00	Implement "Open Streets" Events with Vario	\$204,073.00	No
ML16066	City of Long Beach Public Works	1/13/2017	9/12/2018		\$75,050.00	\$0.00	Implement an "Open Streets" Event	\$75,050.00	No
ML16068	Riverside County Dept of Public Heal	12/2/2016	8/1/2018		\$171,648.00	\$0.00	Implement an "Open Streets" Events with V	\$171,648.00	No
ML16069	City of West Covina	3/10/2017	6/9/2021		\$54,199.00	\$0.00	Installation of EV Charging Infrastructure	\$54,199.00	No
ML16070	City of Beverly Hills	2/21/2017	6/20/2023		\$90,000.00	\$0.00	Purchase 3 H.D. Nat. Gas Vehicles	\$90,000.00	No
ML16072	City of Palm Desert	3/4/2016	1/3/2020		\$56,000.00	\$0.00	Installation of EV Charging Infrastructure	\$56,000.00	No
ML16073	City of Long Beach Public Works	1/13/2017	7/12/2017		\$50,000.00	\$0.00	Implement an "Open Streets" Event	\$50,000.00	No
ML16074	City of La Verne	7/22/2016	1/21/2023		\$365,000.00	\$0.00	Install CNG Fueling Station	\$365,000.00	No
ML16075	City of San Fernando	10/27/2016	2/26/2019		\$354,000.00	\$0.00	Install a Class 1 Bikeway	\$354,000.00	No
ML16076	City of San Fernando	2/21/2017	8/20/2021		\$100,000.00	\$0.00	Install EV Charging Infrastructure	\$100,000.00	No
ML16078	City of Moreno Valley	5/6/2016	11/5/2017		\$32,800.00	\$0.00	Install Bicycle Infrastructure & Implement Bi	\$32,800.00	No
ML16083	City of El Monte	4/1/2016	4/30/2021		\$57,210.00	\$0.00	Install EV Charging Infrastructure	\$57,210.00	No
MS16001	Los Angeles County MTA	4/1/2016	4/30/2017		\$1,350,000.00	\$0.00	Clean Fuel Transit Service to Dodger Stadiu	\$1,350,000.00	No
MS16004	Mineral LLC	9/4/2015	7/3/2017	1/3/2018	\$27,690.00	\$6,900.00	Design, Develop, Host and Maintain MSRC	\$20,790.00	No
MS16030	The Better World Group	12/19/2015	12/31/2017		\$130,716.00	\$90,585.19	Programmic Outreach Services to the MSR	\$40,130.81	No
MS16082	Riverside County Transportation Co	9/3/2016	8/2/2018	6/2/2018	\$590,759.00	\$0.00	Extended Freeway Service Patrols	\$590,759.00	No
MS16084	Transit Systems Unlimited, Inc.	5/6/2016	2/28/2018		\$565,600.00	\$215,130.00	Implement Special Shuttle Service from Uni	\$350,470.00	No
MS16086	San Bernardino County Transportatio	9/3/2016	10/2/2021		\$800,625.00	\$0.00	Freeway Service Patrols	\$800,625.00	No
MS16087	Burrtec Waste & Recycling Services,	7/8/2016	3/7/2023		\$100,000.00	\$0.00	Construct New Limited-Access CNG Station	\$100,000.00	No
MS16089	Orange County Transportation Autho	7/8/2016	4/30/2017		\$128,500.00	\$128,500.00	Implement Special Bus Service to Angel Sta	\$0.00	No
MS16090	Los Angeles County MTA	10/27/2016	4/26/2020		\$2,500,000.00	\$0.00	Expansion of the Willowbrook/Rosa Parks Tr	\$2,500,000.00	No
MS16091	San Bernardino County Transportatio	10/7/2016	11/6/2018		\$1,000,000.00	\$0.00	Traffic Signal Synchronization Projects	\$1,000,000.00	No
MS16092	San Bernardino County Transportatio	2/3/2017	1/2/2019		\$250,000.00	\$0.00	Implement a Series of "Open Streets" Event	\$250,000.00	No
MS16093	Orange County Transportation Autho	9/3/2016	3/2/2018		\$1,553,657.00	\$0.00	Implement a Mobile Ticketing System	\$1,553,657.00	No

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
MS16094	Riverside County Transportation Co	1/25/2017	1/24/2022		\$1,909,241.00	\$0.00	MetroLink First Mile/Last Mile Mobility Strate	\$1,909,241.00	No
MS16096	San Bernardino County Transportatio	10/27/2016	12/26/2019		\$450,000.00	\$0.00	EV Charging Infrastructure	\$450,000.00	No
MS16097	Walnut Valley Unified School District	10/7/2016	11/6/2022		\$250,000.00	\$175,000.00	Expand CNG Station & Modify Maintenance	\$75,000.00	No
MS16099	Foothill Transit	3/3/2017	3/31/2017		\$50,000.00	\$0.00	Provide Special Bus Service to the Los Ange	\$50,000.00	No
MS16102	Nasa Services, Inc.	2/21/2017	4/20/2023		\$100,000.00	\$0.00	Construct a Limited-Access CNG Station	\$100,000.00	No
MS16103	Arrow Services, Inc.	2/3/2017	4/2/2023		\$100,000.00	\$0.00	Construct a Limited-Access CNG Station	\$100,000.00	No
MS16105	Huntington Beach Union High School	3/3/2017	7/2/2024		\$175,000.00	\$0.00	Expansion of Existing CNG Infrastructure	\$175,000.00	No
MS16112	Orange County Transportation Autho	4/14/2017	3/13/2024		\$1,470,000.00	\$0.00	Repower Up to 98 Transit Buses	\$1,470,000.00	No
MS16114	City of Norwalk	3/3/2017	6/2/2024		\$45,000.00	\$0.00	Repower Up to 3 Transit Buses	\$45,000.00	No
MS16115	City of Santa Monica	4/14/2017	7/13/2025		\$870,000.00	\$0.00	Repower Up to 58 Transit Buses	\$870,000.00	No
MS16116	Riverside Transit Agency	3/3/2017	1/2/2023		\$10,000.00	\$0.00	Repower One Transit Bus	\$10,000.00	No
MS16120	Omnitrans	4/7/2017	5/6/2025		\$945,000.00	\$0.00	Purchase 39 Transit Buses and Repower 24	\$945,000.00	No

**Total: 83**

#### Pending Execution Contracts

ML16014	City of Dana Point				\$153,818.00	\$0.00	Extend an Existing Class 1 Bikeway	\$153,818.00	No
ML16022	Los Angeles Department of Water an				\$390,000.00	\$0.00	Purchase 13 H.D. Nat. Gas Vehicles	\$390,000.00	No
ML16067	City of South El Monte				\$73,329.00	\$0.00	Implement an "Open Streets" Event	\$73,329.00	No
ML16071	City of Highland				\$264,500.00	\$0.00	Implement a "Complete Streets" Pedestrian	\$264,500.00	No
ML16077	City of Rialto				\$463,216.00	\$0.00	Pedestrian Access Improvements, Bicycle L	\$463,216.00	No
MS16029	Orange County Transportation Autho				\$851,883.00	\$0.00	Transportation Control Measure Partnership	\$851,883.00	No
MS16088	Transit Systems Unlimited, Inc.				\$17,000.00	\$0.00	Expansion of Existing CNG Station	\$17,000.00	No
MS16100	Southern California Regional Rail Au				\$80,455.00	\$0.00	Provide Metrolink Service to Autoclub Speed	\$80,455.00	No
MS16104	City of Perris				\$175,000.00	\$0.00	Expansion of Existing CNG Infrastructure	\$175,000.00	No
MS16106	City of Lawndale				\$175,000.00	\$0.00	Expansion of Existing CNG Infrastructure	\$175,000.00	No
MS16107	Athens Services				\$100,000.00	\$0.00	Construct a Limited-Access CNG Station	\$100,000.00	No
MS16108	VNG 5703 Gage Avenue, LLC				\$150,000.00	\$0.00	Construct Public-Access CNG Station in Bell	\$150,000.00	No
MS16109	Sanitation Districts of Los Angeles C				\$275,000.00	\$0.00	Expansion of an Existing L/CNG Station	\$275,000.00	No
MS16110	City of Riverside				\$300,000.00	\$0.00	Expansion of Existing CNG Station and Mai	\$300,000.00	No
MS16111	VNG 5703 Gage Avenue, LLC				\$150,000.00	\$0.00	Construct Public Access CNG Station in Pla	\$150,000.00	No
MS16113	Los Angeles County MTA				\$1,875,000.00	\$0.00	Repower Up to 125 Transit Buses	\$1,875,000.00	No
MS16117	Omnitrans				\$175,000.00	\$0.00	Expansion of Existing CNG Infrastructure	\$175,000.00	No
MS16118	Omnitrans				\$175,000.00	\$0.00	Expansion of Existing CNG Infrastructure	\$175,000.00	No
MS16119	Omnitrans				\$150,000.00	\$0.00	New Public Access CNG Station	\$150,000.00	No
MS16121	Long Beach Transit				\$600,000.00	\$0.00	Purchase 40 New Transit Buses with Near-Z	\$600,000.00	No

**Total: 20**

#### Declined/Cancelled Contracts

ML16065	City of Temple City				\$500,000.00	\$0.00	Implement a "Complete Streets" Pedestrian	\$500,000.00	No
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Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
MS16043	LBA Realty Company LLC				\$100,000.00	\$0.00	Install Limited-Access CNG Station	\$100,000.00	No
MS16080	Riverside County Transportation Co				\$1,200,000.00	\$0.00	Passenger Rail Service for Coachella and St	\$1,200,000.00	No
MS16098	Long Beach Transit				\$198,957.00	\$0.00	Provide Special Bus Service to Stub Hub Ce	\$198,957.00	No

**Total: 4**

#### **Closed Contracts**

ML16031	City of Cathedral City	12/19/2015	2/18/2017		\$25,000.00	\$25,000.00	Street Sweeping in Coachella Valley	\$0.00	Yes
MS16002	Orange County Transportation Autho	10/6/2015	5/31/2016		\$722,266.00	\$703,860.99	Clean Fuel Transit Service to Orange Count	\$18,405.01	Yes
MS16003	Special Olympics World Games Los	10/9/2015	12/30/2015		\$380,304.00	\$380,304.00	Low-Emission Transportation Service for Sp	\$0.00	Yes
MS16085	Southern California Regional Rail Au	3/11/2016	9/30/2016		\$78,033.00	\$64,285.44	Special MetroLink Service to Autoclub Spee	\$13,747.56	No

**Total: 4**

#### **Open/Complete Contracts**

ML16027	City of Whittier	1/8/2016	11/7/2022		\$30,000.00	\$30,000.00	Purchase 1 H.D. Nat. Gas Vehicle	\$0.00	Yes
ML16037	City of Rancho Cucamonga	2/5/2016	11/4/2022		\$30,000.00	\$30,000.00	Purchase One Heavy-Duty Natural Gas Vehi	\$0.00	Yes
ML16055	City of Ontario	5/6/2016	5/5/2022		\$270,000.00	\$270,000.00	Purchase Nine Heavy-Duty Natural-Gas Veh	\$0.00	Yes
ML16061	City of Murrieta	4/27/2016	1/26/2020		\$11,642.00	\$9,398.36	Installation of EV Charging Infrastructure	\$2,243.64	Yes
ML16063	City of Glendora	3/4/2016	4/3/2022		\$30,000.00	\$30,000.00	Purchase One H.D. Nat. Gas Vehicle	\$0.00	Yes
ML16079	City of Yucaipa	4/1/2016	3/31/2020		\$5,000.00	\$5,000.00	Purchase Electric Lawnmower	\$0.00	Yes
MS16081	EDCO Disposal Corporation	3/4/2016	10/3/2022		\$150,000.00	\$150,000.00	Expansion of Existing Public Access CNG St	\$0.00	Yes
MS16095	Orange County Transportation Autho	7/22/2016	5/31/2017		\$694,645.00	\$672,864.35	Implement Special Bus Service to Orange C	\$21,780.65	No

**Total: 8**

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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## ***FY 2016-2018 Contracts***

### ***Open Contracts***

MS18003	Geographics	2/21/2017	2/20/2021		\$56,953.00	\$3,234.00	Design, Host and Maintain MSRC Website	\$53,719.00	No
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**Total: 1**

### ***Pending Execution Contracts***

MS18001	Los Angeles County MTA				\$807,945.00	\$0.00	Provide Clean Fuel Transit Service to Dodge	\$807,945.00	No
MS18002	Southern California Association of G				\$2,500,000.00	\$0.00	Regional Active Transportation Partnership	\$2,500,000.00	No
MS18004	Orange County Transportation Autho				\$503,272.00	\$0.00	Provide Special Rail Service to Angel Stadiu	\$503,272.00	No

**Total: 3**

 [Back to Agenda](#)

BOARD MEETING DATE: June 2, 2017

AGENDA NO. 27

REPORT: California Air Resources Board Monthly Meeting

SYNOPSIS: The California Air Resources Board met on May 25, 2017, in Sacramento, CA.  
The following is a summary of this meeting.

RECOMMENDED ACTION:  
Receive and File.

Judith Mitchell, Member  
SCAQMD Governing Board

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The California Air Resources Board's (CARB or Board) May meeting was held on May 25, 2017 in Sacramento at the California Environmental Protection Agency Headquarters Building. Key items presented are summarized below.

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## **Consent Items**

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### **1. Public Meeting to Consider California's Proposed State Plan for the Federal Municipal Solid Waste Landfill Emission Guidelines**

This item was removed from the consent calendar to provide an opportunity for a short presentation by staff on CARB's Proposed State Compliance Plan for meeting the recently stayed new federal Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills (federal guidelines). The new federal guidelines are met by the CARB Landfill Methane Regulation which goes beyond the federal guidelines and will result in greater methane reductions. The Landfill Methane Regulation also simplifies compliance with the State and federal law, and has broad support from industry, CAPCOA and local air districts. The Executive Officer will submit the approved State Compliance Plan to U.S. EPA.

## **2. Public Meeting to Consider the 2016 Ozone State Implementation Plan for the Western Mojave Nonattainment Area**

The Board adopted the Western Mojave Desert State Implementation Plan for the 75 parts per billion 8-Hour Ozone Standard (Ozone SIP). The Executive Officer will submit the approved Ozone SIP to U.S. EPA as a revision to California's State Implementation Plan.

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### **Discussion Items**

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#### **1. Public Meeting to Hear a Continuation of the Update to PM2.5 State Implementation Plan Development for the San Joaquin Valley**

The Board continued its discussion of the PM2.5 State Implementation Plan (PM2.5 SIP) for the San Joaquin Valley (Valley) that was first discussed at the October 2016 Board meeting. Staff provided an update to the Board on additional public outreach conducted in coordination with the San Joaquin Valley Air Pollution Control District (District) as well as recommendations for near-term reductions from stationary and mobile sources that are part of a comprehensive strategy for meeting the PM2.5 standards in the Valley. The near-term actions include strengthening residential wood burning regulations; enhancing control requirements for commercial charbroiling; reducing sources of agricultural and urban dust; developing new measures to reduce heavy-duty truck emissions through an inspection and maintenance program as well as through incentives to accelerate the turnover of older trucks, buses, and off-road equipment to cleaner technologies; and requiring more stringent emission standards for boilers, engines, and glass plants. These near-term actions, coupled with the existing control program, will bring most of the Valley into attainment. Staff will be working with the District over the next few months to identify approaches for achieving the small remaining emissions reductions needed attainment gap. The Board is scheduled to consider the comprehensive San Joaquin Valley PM2.5 SIP later this year.

#### **2. Public Meeting to Hear an Informational Update on Opportunities for Overcoming Barriers to Clean Transportation Access for Low-Income Residents**

The Board heard an overview of the draft guidance document developed pursuant to Senate Bill 350. The guidance document will provide a better understanding of the barriers low-income residents face to access zero emission and near-zero emission transportation and mobility options throughout the State. Staff presented these findings and the feedback they have received from low-income residents and community groups. The presentation included staff's draft recommendations for increasing access to clean transportation. The Board directed staff to hold further community meetings and to collaborate with local and state transportation agencies.

### **3. Public Meeting to Hear an Update on International Coordination**

The Board heard an update on CARB's international climate and air quality collaborations. Foreign national and sub-national jurisdictions have long sought California's expertise in areas such as air quality monitoring and planning, the enforcement of regulations, advanced technologies in zero emission vehicles and clean fuels, and carbon pricing and green-house-gas emission reductions. An example of California and Governor Brown's global leadership is the Under 2 MOU, a world-wide collaboration of 170 states, provinces, regions, cities, and nations, representing 37 percent of the global economy, endorsing the agreement to tackle climate change.

#### **Attachment**

CARB May 25, 2017 Meeting Agenda

**PUBLIC MEETING AGENDA**

**May 25, 2017**

**[Webcast](#)**

**LOCATION:**

California Environmental Protection Agency  
Air Resources Board  
Byron Sher Auditorium, 2<sup>nd</sup> Floor  
1001 I Street  
Sacramento, California 95814

This facility is accessible by public transit. For transit information, call (916) 321-BUSS, website:

<http://www.sacrt.com>

(This facility is accessible to persons with disabilities.)

**TO SUBMIT WRITTEN COMMENTS ON AN  
AGENDA ITEM IN ADVANCE OF THE MEETING GO  
TO: <http://www.arb.ca.gov/lispub/comm/bclist.php>**

**Thursday  
May 25, 2017  
9:00 a.m.**

**CONSENT CALENDAR:**

The following items on the consent calendar will be presented to the Board immediately after the start of the public meeting, unless removed from the consent calendar either upon a Board member's request or if someone in the audience wishes to speak on them.

**Consent Item #**

**17-5-1: Public Meeting to Consider California's Proposed State Plan for the Federal Municipal Solid Waste Landfill Emission Guidelines**

*The Board will consider approving California's plan for compliance with the United States Environmental Protection Agency's new Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills (Title 40 Code of Federal Regulations, Part 60, Subpart Cf).*

[More Information](#)

[Proposed Resolution](#)

**17-5-2: Public Meeting to Consider the 2016 Ozone State Implementation Plan for the Western Mojave Nonattainment Area**

*The Board will consider adopting the Western Mojave Desert Plan for the 75 ppb 8-Hour Ozone Standard (Ozone SIP). If adopted, the Air Resources Board will submit the Ozone SIP to the United States Environmental Protection Agency as a revision to California's State Implementation Plan.*

[More Information](#)

[Proposed Resolution](#)



**DISCUSSION ITEMS:**

**Note:** The following agenda items may be heard in a different order at the Board meeting.

**Agenda Item #****17-5-3: Public Meeting to Hear a Continuation of the Update to PM2.5 State Implementation Plan Development for the San Joaquin Valley**

Spanish translation will be provided at the Board Meeting for this item, Item 17-5-3.

*The Board will continue its discussion of the PM2.5 State Implementation Plan for the San Joaquin Valley that was previously discussed at the October 2016 Board meeting. Staff will provide an update to the Board on the additional outreach that has been conducted in coordination with the District, the process for developing an overall PM2.5 control strategy, and recommendations for identifying additional near-term reductions from stationary and mobile sources.*

[More Information](#)

[Staff Presentation](#)

**17-5-4: Public Meeting to Hear an Informational Update on Opportunities for Overcoming Barriers to Clean Transportation Access for Low-Income Residents**

*The Board will hear an overview of the draft guidance document staff developed pursuant to Senate Bill 350 to provide a better understanding of the barriers low-income residents face to access zero-emission and near-zero emission transportation and mobility options throughout the State. This will include staff's findings on the barriers, feedback received from low-income residents, and draft recommendations for increasing access to clean transportation.*

[More Information](#)

[Staff Presentation](#)

**17-5-5: Public Meeting to Hear an Update on International Coordination**

*The Board will hear an update on the Air Resources Board climate and air quality collaborations with foreign jurisdictions.*

[More Information](#)

[Staff Presentation](#)

**CLOSED SESSION**

*The Board will hold a closed session, as authorized by Government Code section 11126(e), to confer with, and receive advice from, its legal counsel regarding the following pending or potential litigation, and as authorized by Government Code section 11126(a):*

*American Fuels and Petrochemical Manufacturers, et al. v. Jane O'Keeffe, et al., U.S. District Court (D. Ore. Portland), Case No. 3:15-CV-00467; Plaintiffs' appeal, U.S. Court of Appeals, Ninth Circuit, Case No. 15-35834.*

*California Chamber of Commerce et al. v. California Air Resources Board, Sacramento Superior Court, Case No. 34-2012-80001313; plaintiffs' appeal, California Court of Appeal, Third District, Case No. C075930.*

*Kimberly-Clark Worldwide, Inc. v. California Air Resources Board, et al., Sacramento County Superior Court, Case No. 34-2015-80002246.*

*Morning Star Packing Company, et al. v. California Air Resources Board, et al.*, Sacramento Superior Court, Case No. 34-2013-800001464; plaintiffs' appeal, California Court of Appeal, Third District, Case No. C075954.

*POET, LLC, et al. v. California Air Resources Board, et al.*, Superior Court of California (Fresno County), Case No. 09CECG04659; plaintiffs' appeal, California Court of Appeal, Fifth District, Case No. F064045; California Supreme Court, Case No. S213394 [remanded to trial court]; plaintiff's appeal of trial court order discharging peremptory writ of mandate, Court of Appeal, Fifth District, Case No. F073340.

*POET, LLC, et al. v. California Air Resources Board, et al.*, Superior Court of California (Fresno County), Case No. 15CECG03380.

*Rocky Mountain Farmers Union, et al. v. Corey*, U.S. District Court (E.D. Cal. Fresno), Case No. 1:09-CV-02234-LJO-DLB; ARB interlocutory appeal, U.S. Court of Appeals, Ninth Circuit, Case No. 12-15131 [remanded to trial court].

*American Fuels and Petrochemical Manufacturers, et al. v. Corey, et al.*, U.S. District Court (E.D. Cal. Fresno), Case No. 1:10-CV-00163-AWI-GSA; ARB's interlocutory appeal, U.S. Court of Appeals, Ninth Circuit, Case No. 10-CV-00163 [remanded to trial court].

*Sowinski v. California Air Resources Board, et al.*, U.S. District Court, Central District of California, Case No. 8:15-CV-02123.

*State of North Dakota, et al. v. United States Environmental Protection Agency*, U.S. Court of Appeals, District of Columbia Circuit, Case No. 16-1242.

*State of North Dakota v. United States Environmental Protection Agency*, U.S. Court of Appeals, District of Columbia Circuit, Case No. 15-1381.

*State of West Virginia et al. v. United States Environmental Protection Agency*, U.S. Court of Appeals, District of Columbia Circuit, Case No. 15-1363.

*State of Wyoming, et al. v. United States Department of the Interior, et al.*, U.S. District Court, District of Wyoming, Case No. 16-CV-285-SWS.

*Transportation Solutions Defense and Education Fund v. California Air Resources Board*, Fresno County Superior Court, Case No. 14CECG01788 (plaintiff's transfer to Sacramento Superior Court, Case No. 34-2014-80001974-CU-WM-GDS).

*Adam Brothers Farming, Inc. v. California Air Resources Board, et al.*, Santa Barbara County Superior Court, Case No. 15 CV04432.

*Alliance for California Business v. California Air Resources Board, et al.*, Glenn County Superior Court, Case No. 13CV01232; plaintiffs' appeal, Court of Appeal, Third District, Case No. C082828.

*Alliance for California Business v. California State Transportation Agency, et al.*, Sacramento County Superior Court, Case No. 34-2016-80002491.

*American Coatings Association, Inc. v. State of California and California Air Resources Board*, Sacramento County Superior Court, Case No. 04CS01707.

*Jack Cody dba Cody Transport v. California Air Resources Board, et al.*, Sacramento Superior Court, Case No. 34-2015-80002116; plaintiff's appeal, Court of Appeal, Third District, Case No. C083083.

*Dalton Trucking, Inc. v. United States Environmental Protection Agency*, U.S. Court of Appeals, District of Columbia Circuit, Case No. 13-1283 (dismissed), U.S. Court of Appeals, Ninth Circuit, Case No. 13-74019.

*Hamilton v. California Air Resources Board, et al.*, U.S. District Court for the Eastern District of California, Case No. 1:15-CV-01942-AWI-SKO.

*John R. Lawson Rock & Oil, Inc. et al. v. California Air Resources Board et al.*, Fresno County Superior Court, Case No. 14-CECG01494; ARB's appeal, Court of Appeal, Fifth District, Case No. F074003.

*Murray Energy Corporation v. United States Environmental Protection Agency*, U.S. Court of Appeals, District of Columbia Circuit, Case No. 15-1385.

*Truck Trailer Manufacturers Association, Inc. v. United States Environmental Protection Agency, et al.*, U.S. Court of Appeals, District of Columbia Circuit, Case No. 16-1430.

*Owner-Operator Independent Drivers Association Inc. et al. v. Corey et al.*, U.S. District Court, (E.D. Cal. Fresno) Case No. 1:13-CV-01998-LJO-SAB (transferred by court to E.D.Cal. Sacramento, Case No. 2:14-CV-00186-MCE-AC), plaintiffs' appeal U.S. Court of Appeals, Ninth Circuit, Case Nos. 15-72101 and 15-16429.

*California Air Resources Board v. Bombardier Recreational Products*, Los Angeles Superior Court, Case No. BC608480.

*California Air Resources Board v. BP West Coast Products LLC*, Contra Costa County Superior Court, Case No. C12-00567.

*California Air Resources Board v. SSA Containers, Inc.*, Los Angeles County Superior Court, Case No. BC628573 and No. BC628722.

*California Air Resources Board v. West Coast Diesel, Inc.*, Fresno County Superior Court, Case No. 15 CECG 03337.

*California Air Resources Board v. Adam Brothers Farming Inc.*, Santa Barbara County Superior Court, Case No. 16CV01758.

*People of the State of California ex rel. California Air Resources Board v. Marten Transport Logistics, LLC*, Los Angeles County Superior Court, Case No. BC645288.

*People v. Southern California Gas Company*, Los Angeles Superior Court, Case No. BC 602973.

*In re: Volkswagen "Clean Diesel" MDL*, United States District Court, Northern District of California, Case No. 15-MD-2672-CRB (JSC).

*Mahan v. California Air Resources Board*, Sacramento County Superior Court, Case No. 34-2016-80002416.

**OPPORTUNITY FOR MEMBERS OF THE BOARD TO COMMENT ON MATTERS OF INTEREST**

*Board members may identify matters they would like to have noticed for consideration at future meetings and comment on topics of interest; no formal action on these topics will be taken without further notice.*

**OPEN SESSION TO PROVIDE AN OPPORTUNITY FOR MEMBERS OF THE PUBLIC TO ADDRESS THE BOARD ON SUBJECT MATTERS WITHIN THE JURISDICTION OF THE BOARD**

*Although no formal Board action may be taken, the Board is allowing an opportunity to interested members of the public to address the Board on items of interest that are within the Board's jurisdiction, but that do not specifically appear on the agenda. Each person will be allowed a maximum of three minutes to ensure that everyone has a chance to speak.*

**TO ELECTRONICALLY SUBMIT WRITTEN COMMENTS ON AN AGENDA ITEM IN ADVANCE OF THE MEETING GO TO:**

<https://www.arb.ca.gov/lispub/comm/bclist.php>

(Note: not all agenda items are available for electronic submittals of written comments.)

**PLEASE NOTE:** No outside memory sticks or other external devices may be used at any time with the Board audio/visual system or any ARB computers. Therefore, PowerPoint presentations to be displayed at the Board meeting must be electronically submitted via email to the Clerk of the Board at [cotb@arb.ca.gov](mailto:cotb@arb.ca.gov) no later than noon on the business day prior to the scheduled Board meeting.

**IF YOU HAVE ANY QUESTIONS, PLEASE CONTACT THE CLERK OF THE BOARD:**

**1001 I Street, 23<sup>rd</sup> Floor, Sacramento, California 95814**

**(916) 322-5594**

**ARB Homepage: [www.arb.ca.gov](http://www.arb.ca.gov)**

**SPECIAL ACCOMMODATION REQUEST**

Consistent with California Government Code Section 7296.2, special accommodation or language needs may be provided for any of the following:

- An interpreter to be available at the hearing;
- Documents made available in an alternate format or another language;
- A disability-related reasonable accommodation.

To request these special accommodations or language needs, please contact the Clerk of the Board at (916) 322-5594 or by facsimile at (916) 322-3928 as soon as possible, but no later than 7 business days before the scheduled Board hearing. TTY/TDD/Speech to Speech users may dial 711 for the California Relay Service.

Consecuente con la sección 7296.2 del Código de Gobierno de California, una acomodación especial o necesidades lingüísticas pueden ser suministradas para cualquiera de los siguientes:

- Un intérprete que esté disponible en la audiencia
- Documentos disponibles en un formato alterno u otro idioma
- Una acomodación razonable relacionados con una incapacidad

Para solicitar estas comodidades especiales o necesidades de otro idioma, por favor llame a la oficina del Consejo al (916) 322-5594 o envíe un fax a (916) 322-3928 lo más pronto posible, pero no menos de 7 días de trabajo antes del día programado para la audiencia del Consejo. TTY/TDD/Personas que necesiten este servicio pueden marcar el 711 para el Servicio de Retransmisión de Mensajes de California.

**SMOKING IS NOT PERMITTED AT MEETINGS OF THE CALIFORNIA AIR RESOURCES BOARD**

BOARD MEETING DATE: June 2, 2017

AGENDA NO. 28

**PROPOSAL:** Adopt Executive Officer's FY 2017-18 Proposed Goals and Priority Objectives, Draft Budget and Proposed Amended Regulation) III – Fees and Determine that Proposed Amendments Are Exempt from CEQA

**SYNOPSIS:** The Executive Officer's Budget, Goals and Priority Objectives for FY 2017-18 have been developed and are recommended for adoption. In addition, staff is proposing amendments to Regulation III – Fees. The Board will first determine that the proposed amendments are exempt from CEQA. These amendments include the following fee increases: 1) Pursuant to Rule 320, an increase of most fees by 2.5% consistent with the Consumer Price Index; 2) A fee increase of 16% in specified fees for Title V sources in FY 2017-18 and an additional 16% increase in FY 2018-19; and 3) A 4% increase in specified fees for non-Title V sources for FY 2017-18 and an additional 4% increase in FY 2018-19. The fee increases have been presented at a Budget Study Session, Budget Advisory Committee meeting and at two public consultation meetings in April with recommendations and comments provided to the Board. Finally, staff recommends other proposed changes to Regulation III which have no fee impact, but do include clarifications, deletions or corrections to existing rule language.

**COMMITTEE:** Special Governing Board Meeting/Budget Study Session, April 21, 2017, Reviewed

**RECOMMENDED ACTIONS:**

1. Remove from Reserves and Designations all amounts associated with the FY 2016-17 Budget;
2. Approve appropriations in the Major Objects for FY 2017-18 of:

Salary and Employee Benefits	\$119,860,494
Services and Supplies	28,067,695
Capital Outlays	<u>1,950,717</u>
Total	<u>\$149,878,906;</u>

3. Approve revenues for FY 2017-18 of \$147,510,310;
4. Approve the addition of 10.25 net authorized/funded positions as detailed in the FY 2017-18 Budget;
5. Delete two existing position classifications: 1) Deputy Executive Officer, Information Management; and 2) Chief Financial Officer;
6. Add two new position classifications: 1) Chief Operating Officer; and 2) Chief Administrative Officer;
7. Approve amendment to SCAQMD Salary Resolution reflecting the deletion and addition of the position classifications discussed in Recommended Actions 5 and 6 above (Attachment C);
8. Approve the SCAQMD FY 2017-18 Goals and Priority Objectives;
9. Approve a projected June 30, 2018 Fund Balance of the following:

<b>Classification<sup>1</sup></b>	<b>Reserves/Unreserved Designations</b>	<b>Amount</b>
Committed	Reserve for Encumbrances	\$7,723,000
Non-spendable	Reserve for Inventory of Supplies	80,000
Assigned	Designated for Enhanced Compliance Activities	883,018
Assigned	Designated for Other Post Employment Benefit (OPEB) Obligations	2,952,496
Assigned	Designated for Permit Streamlining	2,288,385
Assigned	Designated for Self-Insurance	2,000,000
Assigned	Designated for Unemployment Claims	80,000
Total Reserves & Unreserved Designations		\$16,006,899
Unassigned	Undesignated Fund Balance	\$21,402,928

10. Adopt the attached Resolution regarding the amendment of Regulation III – Fees (Attachment F):
  - a. Determining that the proposed amendments to Regulation III – Fees (Proposed Amended Rules 301) – Permitting and Associated Fees, 303 – Hearing Board Fees, 304 – Equipment, Materials and Ambient Air Analyses, 304.1 – Analyses Fees, 306 – Plan Fees, 307.1 – Alternative Fees for Air Toxics Emissions Inventory, 308 – On-Road Motor Vehicle Mitigation Options Fees, 309 – Fees for Regulation XVI, 311 – Air Quality Investment Program (AQIP) Fees, 313 – Authority to Adjust Fees and Due Dates, 314 – Fees for Architectural Coatings, and 315 – Fees for Training Classes and License Renewal, are exempt from the requirements of the California Environmental Quality Act.

<sup>1</sup> The terms Committed, Nonspendable, Assigned, and Unassigned are terms established by the Governmental Accounting Standards Board.

- b. Amending Rules 301 – Permitting and Associated Fees, 303 – Hearing Board Fees, 304 – Equipment, Materials and Ambient Air Analyses, 304.1 – Analyses Fees, 306 – Plan Fees, 307.1 – Alternative Fees for Air Toxics Emissions Inventory, 308 – On-Road Motor Vehicle Mitigation Options Fees, 309 – Fees for Regulation XVI, 311 – Air Quality Investment Program (AQIP) Fees, 313 – Authority to Adjust Fees and Due Dates, 314 – Fees for Architectural Coatings, and 315 – Fees for Training Classes and License Renewal.

Wayne Nastri  
Executive Officer

MBO:lg

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## **Background**

### *Budget*

The period covered by the FY 2017-18 budget is from July 1, 2017 to June 30, 2018. The General Fund budget is the agency's operating budget and is structured by office and account code. The accounts are categorized into three Major Objects: Salaries and Employee Benefits, Services and Supplies, and Capital Outlays. The budget is supplemented with a Work Program which estimates staff resources and expenditures along program and activity lines. A Work Program Output Justification is completed for each Work Program which identifies performance goals, measurable outputs, legal mandates, activity changes and revenue categories.

The annual expenditure and revenue budget for the General Fund is adopted on a modified accrual basis. All annual expenditure appropriations lapse at fiscal year-end if they have not been expended or encumbered. Throughout the year, budget amendments may be necessary to accommodate additional revenues and expenditure needs.

The Executive Officer's Budget and Work Program for FY 2017-18 represents the input over the past several months from Board members, the public, executive management, and staff. This year's process included meetings with the Budget Advisory Committee, two public consultations held on April 11, 2017 and April 18, 2017 and one workshop held for the Board on April 21, 2017.

### *Regulation III*

Regulation III – Fees, primarily establishes the fee rates and schedules to recover SCAQMD's reasonable costs of regulating and providing services to permitted sources. The Permitted Source Program is primarily supported by three fees that provide over 62% of the SCAQMD budget, namely permit processing fees, annual renewal (equipment-based) fees, and annual renewal (emissions-based) fees, all of which are contained in Rule 301. In addition, the Permitted Source Program includes certain

activities for which separate fees are charged, such as Source Testing and Hearing Board variances and permit appeals. Also included in the permit-related fee program are Rule 222 registration fees and plan fees, since these are similar to permits for the sources to which they apply. Regulation III – Fees, also establishes fees and rates for other fee programs, unrelated to the Permitted Source Program, such as Transportation Programs fees and Area Source fees (architectural coatings).

In the 1990's the SCAQMD began experiencing significant shortfalls in its budget due to declining revenues that threatened the continuity of many of its programs and services. Shortfalls continue to exist despite the significant budget reductions adopted, increasing vacancy rates due to unfilled positions and continuous improvements in performance and efficiency. The SCAQMD faces a number of challenges in the upcoming years: changes in federal grant funding levels, increased retirement costs due to actuarial and investment adjustments, and one-time penalties and settlement revenue that varies annually.

## **Proposal**

### *Budget*

The budget for FY 2017-18 proposes expenditures of \$149,878,906 and revenues of \$147,510,310, using prior year revenues to supplement FY 2017-18 estimated revenues. The proposed FY 2017-18 budget represents an increase of \$8,351,211 (6%) in total expenditures from the budget adopted by the Board in May 2016. Staff is proposing the net addition of 10.25 positions for FY 2017-18, including a net total of 6.25 new positions in Monitoring and Analysis, Rule Development, Enforcement, and Administration Support as well as two new positions each in Mobile Sources and Air Toxics offset by revenue from mobile source-related incentive programs and Air Toxics. The 0.25 FTE is for a 3-month overlap of an executive-level position. In Services and Supplies, the proposal for FY 2017-18 reflects an increase of \$2,231,998 (9%) compared to the FY 2016-17 adopted budget while Capital Outlays are increasing by \$1,100,717 (129%).

The proposed FY 2017-18 budget represents an increase of \$11,064,030 (8%) in total revenue from the budget adopted by the Board in May 2016. As part of this budget package, specific fees in Regulation III – Fees, will be automatically adjusted by the California Consumer Price Index (CPI) as provided for under SCAQMD Rule 320. In addition, the fee rule amendments include a proposed 16% increase in specified fees for Title V sources in FY 2017-18 and an additional 16% increase in FY 2018-19, and a 4% increase in specified fees for non-Title V sources for FY 2017-18 and another 4% increase in FY 2018-19.



### *Regulation III*

For FY 2017-18, proposed amendments to Regulation III consist of the following four components:

1. A Consumer Price Index (CPI), inflation based, rate adjustment to most fees in Regulation III pursuant to Rule 320 of 2.5%;
2. An additional fee rate increase above CPI of 16% in each of the next two (2) FYs, in permit-related services (permit processing, annual renewals and plans, but excluding emissions-based fees) for Title V facilities;
3. An additional fee rate increase above CPI of 4% in each of the next two (2) FYs, in permit-related services (permit processing, annual renewals and plans, but excluding emissions-based fees) for non-Title V facilities; and
4. Administrative amendments, with no fiscal impact, that delete, update, clarify or correct existing text in the regulation.

The proposed fee amendments were formulated to address cost recovery by refining the alignment of program revenue with program costs that have typically never been fully recovered. With respect to Title V facilities, the fee increase is also being proposed in response to a 2016 U.S. EPA audit wherein U.S. EPA found that Title V fees were not recovering Title V costs as required by the Clean Air Act. Despite the proposed fee amendments, staff currently projects a \$6.8 million deficit in revenues in the FY 2017-18 proposed budget for programs related to permit processing fees. Factors impacting budget shortfalls include legally mandated funding for the San Bernardino County Employee Retirement Association (SBCERA) which is significantly increasing retirement costs (and which translates into certain overhead costs), decreasing emissions fees revenues, and revenues remaining generally flat from annual permit renewal fees.

### **Revenue Impacts**

The 2.5% CPI adjustments to most fees in Regulation III will result in \$2.2 million in partial cost recovery for FY 2017-18. For Title V sources, the proposed additional 32% adjustment in permit processing and annual operating renewals fees, implemented over the next two fiscal years (16% in FY 2017-18 and 16% in FY 2018-19) will result in an additional \$1.5 million for FY 2017-18 and \$1.8 million for FY 2018-19. For non-Title V sources, the proposed additional 8% adjustment in permit processing and annual operating renewals fees, implemented over the next two fiscal years (4% in FY 2017-18 and 4% in FY 2018-19) will result in an additional \$2.1 million for FY 2017-18 and \$2.2 million for FY 2018-19.

### **California Environmental Quality Act**

The proposed project is amending Regulation III – Fees (Rules 301, 303, 304, 304.1, 306, 307.1, 308, 309, 311, 313, 314, and 315). Pursuant to the California Environmental Quality Act (CEQA) and SCAQMD Rule 110, the SCAQMD, as lead agency for the proposed project, has reviewed the proposed project pursuant to: 1) CEQA Guidelines § 15002(k) – General Concepts, the three-step process for deciding which document to prepare for a project subject to CEQA; and 2) CEQA Guidelines § 15061 – Review for Exemption, procedures for determining if a project is exempt from CEQA. With respect to the proposed amendments to Rules 301, 306, 308 and 314 which are identified as being strictly administrative in nature, it can be seen with certainty that there is no possibility that the proposed project will have a significant adverse effect on the environment. Thus, the project is considered to be exempt from CEQA pursuant to CEQA Guidelines § 15061(b)(3) – Activities Covered by General Rule. Additionally, with respect to the proposed amendments reflecting increases in fees, as well as the proposed amendments which are identified as being strictly administrative in nature, the proposed project is statutorily exempt from CEQA requirements pursuant to CEQA Guidelines § 15273 – Rates, Tolls, Fares, and Charges, because the proposed amendments to Rules 301, 303, 304, 304.1, 306, 307.1, 308, 309, 311, 313, 314, and 315 involve charges by public agencies for the purpose of meeting operating expenses and financial reserve requirements. A Notice of Exemption (Attachment K) has been prepared pursuant to CEQA Guidelines § 15062 – Notice of Exemption. If the project is approved, the Notice of Exemption will be filed with the county clerks of Los Angeles, Orange, Riverside and San Bernardino counties.

### **Socioeconomic Assessment**

Two socioeconomic reports are included as attachments to the staff report. The first report (Attachment I) analyzes the impacts of the Rule 320 2.5% CPI adjustment to Regulation III fees. The second report (Attachment J) analyzes the impacts of the combination of the proposed CPI fee increase and the proposed permit-related fee increases for Title V and non-Title V facilities as part of the Proposed Amended Regulation (PAR) III – Fees. Nearly all facilities regulated by SCAQMD would be affected by the proposed fee increases, while the manufacturing sector is estimated to incur the largest share of the combined fee increase (46 percent), followed by the services sector (17 percent).

### **Resource Impacts**

The proposed FY 2017-18 budget assumes a 2.5% fee increase, consistent with Rule 320 which was adopted by the Board on October 29, 2010 to allow for an increase of fees based on the change in the California Consumer Price Index. In accordance with Rule 320, the Draft Socioeconomic Assessment for Automatic Consumer Price Index (CPI) Increase was made available to the public on March 15, 2017 and public comments and responses, along with recommendations by the Budget Advisory Committee, were provided to the Board by the April 15 and extended April 25

deadlines. Additionally, a socioeconomic assessment of the combined PAR III – Fees, was made available to the public on April 7, 2017. The PAR III – Fees, also includes a 16% increase in specified fees for Title V sources for FY 2017-18 and an additional 16% increase in FY 2018-19, and a 4% increase in specified fees for non-Title V sources for FY 2017-18 and another 4% increase in FY 2018-19.

Copies of the Draft Budget and Work Program for FY 2017-18 have been transmitted to the Board and the document is also available via SCAQMD's website at [www.aqmd.gov](http://www.aqmd.gov). Budgets are available by request from the SCAQMD Public Information Center, (909) 396-2001. The staff proposal for amending fee rules is also available on SCAQMD's website under Proposed Rules.

### **Attachments**

- A. Summary of Proposals
- B. FY 2017-18 Budget and Work Program
- C. Amended SCAQMD Salary Resolution
- D. Rule Development Process
- E. Key Contacts
- F. Resolution
- G1.-G12. Proposed Amended Rules 301, 303, 304, 304.1, 306, 307.1, 308, 309, 311, 313, 314, and 315
- H. Final Staff Report
- I. Final Socioeconomic Assessment for Automatic CPI Increase
- J. Final Socioeconomic Assessment for PAR III- Fees
- K. Notice of Exemption
- L. Board Meeting Presentation

# **ATTACHMENT A**

## **SUMMARY OF PROPOSALS**

For Fiscal Year (FY) 2017-18, proposed amendments to Regulation III consist of the following four (4) components:

### **COMPONENT 1: CPI ADJUSTMENT**

For FY 2017-18, staff is recommending that all Regulation III fees be allowed to adjust, pursuant to the automatic action of Rule 320, by the 2.5% increase commensurate with the change in the CY 2016 CPI, but excluding the following fees:

- 1) The returned check service fee in various rules (currently set by state law at \$25),
- 2) Rule 301(w) – Enforcement Inspection Fees for Statewide Portable Equipment Registration Program (or PERP fees; since these fees are set by the state),
- 3) Rule 307.1 Table I – Facility Fees By Program Category; “State Fee” column figures only (since these fees are set by the state), and
- 4) Rule 311(c) Air Quality Investment Program Fees.

### **COMPONENT 2: TITLE V PERMIT PROCESSING AND ANNUAL RENEWAL FEE ADJUSTMENT**

An additional fee rate increase above the 2.5% increase in the CPI of 16% in each of the next two (2) FYs\*, in permit-related services (permit processing, annual renewals and plans; but excluding emissions based fees) for Title V facilities. See Appendix B of the staff report for the listing of specific fees in Regulation III subject to the Title V adjustment.

### **COMPONENT 3: NON-TITLE V PERMIT PROCESSING AND ANNUAL RENEWAL FEE ADJUSTMENT**

An additional fee rate increase above the 2.5% increase in the CPI of 4% in each of the next two (2) FYs\*, in permit-related services for non-Title V facilities. See Appendix B of the staff report for the listing of specific fees in Regulation III subject to the non-Title V adjustment.

### **COMPONENT 4: ADMINISTRATIVE AMENDMENTS (NO FISCAL IMPACT)**

Administrative amendments, with no fiscal impact, that delete, update, clarify or correct existing text in the regulation, as follows:

- Update Rule 301 (a)(10), subdivision (j) heading and (j)(4) regarding Public Notification to align with prior amendments to Rule 212. This amendment updates references in Rule 301 to Rule 212 by removing the word “significant” from “significant project” in Rule 301 (a)(10), Subdivision (j) heading and (j)(4);
- Delete obsolete references in Rule 301 to the FY 2007-08 six-month transitional emissions fees;
- Clarify reference to the list of contaminants in Rule 301(e)(6) pertaining to clean fuels fee thresholds;
- Extend the due date for certain fees in Rule 301(e)(9), (10), (11) and (15) from sixty (60) to seventy-five (75) days;
- Delete obsolete Rule 301(l)(10)(E) reference to special operating fee for petroleum refineries for FY 2007-08 through FY 2008-09;
- Delete obsolete prior FY fees for initial and final Title V fees in Rule 301(m)(3)(A) and (B);
- Delete obsolete CPI rebate provision for FY 2010-11 in Rule 301(ab);
- Update the reference in Rule 301(v)(2) regarding fees for expedited CEQA work from 301(i) to 301(j);
- Correct a typographical error in Rule 301 Table IA for “Afterburner (< 1 MMBTU/hr, venting m.s.)” to “Afterburner ( $\leq$  1 MMBTU/hr venting m.s.)”;
- Reformat the table in Rule 306(h) listing the types of plans subject to an annual renewal/review fee;
- Clarify that the published Rule 306(q) fee for optional expedited plan processing includes an amount for mileage;
- Update Rule 308(k) Emission Reductions Project Review to delete a reference to a past date and to correct the reference to Rule 2202; and
- Re-commence publishing fees in Rule 314(g) to 3 decimal places (with a proviso that the actual amount remitted is rounded to the nearest penny).
- Other miscellaneous text corrections have no fiscal impact but do correct references in the rule.

\* These second year FY 2018-19 fees may also be further adjusted by the change in the CY 2017 CPI, pursuant to the automatic action of Rule 320.

# Budget & Work Program



Fiscal Year  
2017-2018

South Coast  
Air Quality  
Management District



# **BUDGET & WORK PROGRAM**

**FISCAL YEAR 2017-2018**

**(Office Budgets not Included)**

Prepared by Finance  
Michael B. O'Kelly, Chief Administrative Officer



**SOUTH COAST  
AIR QUALITY MANAGEMENT DISTRICT**

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## **SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

### **GOVERNING BOARD**

WILLIAM A. BURKE, Ed.D  
Chairman  
Speaker of the Assembly Appointee

BEN BENOIT  
Vice Chair  
County of Riverside  
Cities Representative

MARION ASHLEY  
County of Riverside Representative

JOE BUSCAINO  
City of Los Angeles Representative

MICHAEL A. CACCIOTTI  
County of Los Angeles  
Cities Representative  
Eastern Region

SHEILA KUEHL  
County of Los Angeles Representative

JOSEPH K. LYOU, Ph.D.  
Governor's Appointee

LARRY McCALLON  
County of San Bernardino  
Cities Representative

JUDY MITCHELL  
County of Los Angeles  
Cities Representative  
Western Region

SHAWN NELSON  
County of Orange Representative

DR. CLARK E. PARKER, SR.  
Senate Rules Committee Appointee

DWIGHT ROBINSON  
County of Orange  
Cities Representative

JANICE RUTHERFORD  
County of San Bernardino Representative

WAYNE NASTRI  
Executive Officer



GOVERNMENT FINANCE OFFICERS ASSOCIATION

*Distinguished  
Budget Presentation  
Award*

PRESENTED TO

**South Coast Air Quality Management District  
California**

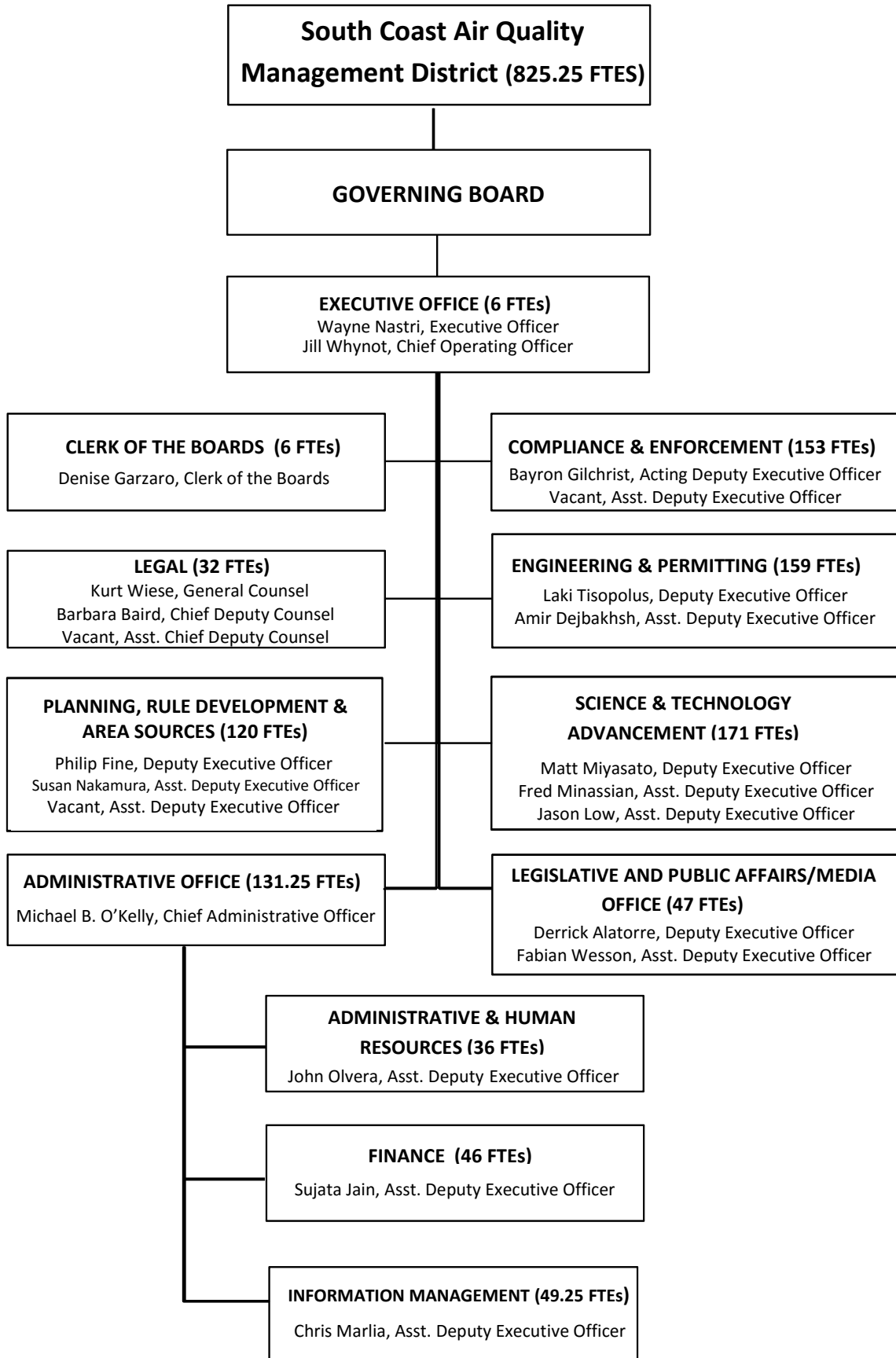
For the Fiscal Year Beginning

**July 1, 2016**

Executive Director

The Government Finance Officers Association of the United States and Canada (GFOA) presented a Distinguished Budget Presentation Award to **South Coast Air Quality Management District, California** for its annual budget for the fiscal year beginning **July 1, 2016**. In order to receive this award, a governmental unit must publish a budget document that meets program criteria as a policy document, as an operations guide, as a financial plan, and as a communications device.

This award is valid for a period of one year only. We believe our current budget continues to conform to program requirements, and we are submitting it to GFOA to determine its eligibility for another award.



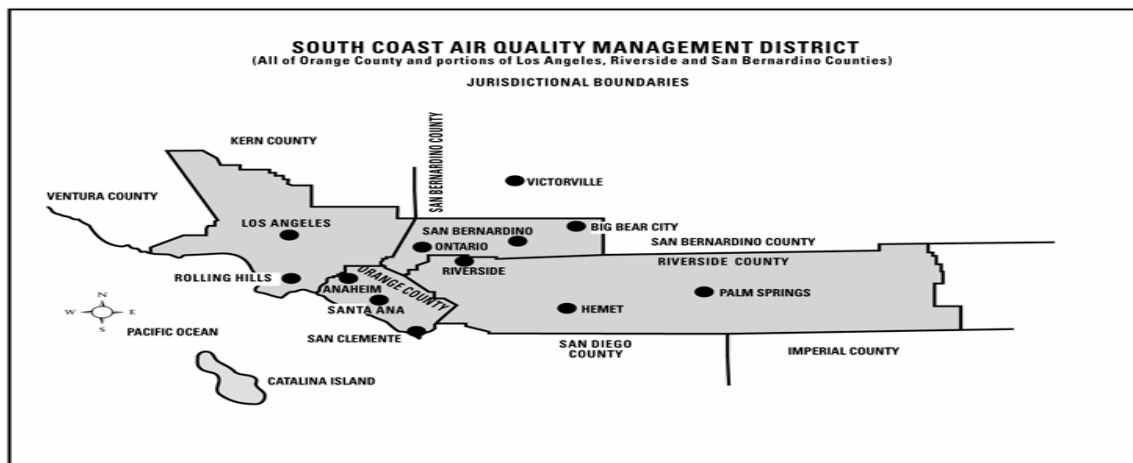
# SUMMARY

## Preface

This document represents the proposed FY 2017-18 Budget and Work Program of the South Coast Air Quality Management District (SCAQMD). The proposed budget is available for public review and comment during the month of April. Two public consultation meetings are scheduled to discuss the proposed budget and proposed fees changes, one on April 11, 2017 and a second on April 18, 2017. In addition, a workshop for the Governing Board is scheduled on April 21, 2017. A final Proposed Draft Budget and Work Program and Proposed Amended Regulation (PAR) III - Fees, which may include changes based on input from the public and Board, will be presented for adoption at a public hearing on June 2, 2017.

## Introduction

The South Coast Air Quality Management District (SCAQMD) began operation on February 1, 1977 as a regional governmental agency established by the California Legislature pursuant to the Lewis Air Quality Management Act. The SCAQMD encompasses all of Orange County and parts of Los Angeles, San Bernardino and Riverside Counties. It succeeded the Southern California Air Pollution Control District (APCD) and its predecessor four county APCDs, of which the Los Angeles County APCD was the oldest in the nation, having been formed in 1947. The SCAQMD Governing Board is composed of 13 members, including four members appointed by the Boards of Supervisors of the four counties in SCAQMD's jurisdiction, six members appointed by cities in the SCAQMD's jurisdiction and three members appointed by the Governor, the Speaker of the State Assembly and the Rules Committee of the State Senate, respectively. The members appointed by the Boards of Supervisors and cities consist of one member of the Board of Supervisors of Los Angeles, Orange, Riverside, and San Bernardino Counties, respectively, and a mayor or member of the city council of a city within Orange, Riverside, and San Bernardino Counties. Los Angeles County cities have three representatives, one each from the western and eastern portions and one member representing the City of Los Angeles.

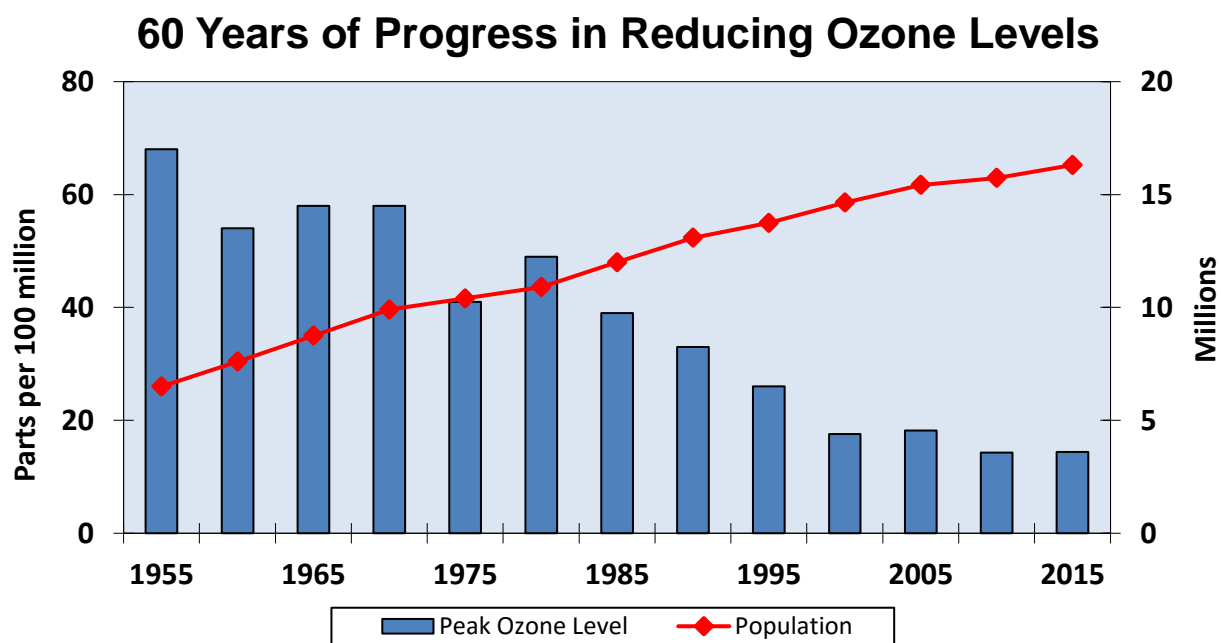


## Air Quality History

The South Coast Air Basin has suffered unhealthy air since its rapid population growth and industrialization during World War II. While air quality has improved, the residents of the Basin still breathe some of the most polluted air in the nation.

The 68-year history of the region's air pollution control efforts is, in many ways, one of the world's key environmental success stories. Peak ozone levels have been cut by almost three-fourths since air monitoring began in the 1950s. Population exposure was cut in half during the 1980s alone.

Since the late 1940s when the war on smog began to 2015, the region's population has more than tripled from 4.8 million to 16.9 million; the number of motor vehicles has increased over five-fold from 2.3 million to 13 million; and the area has grown into one of the most prosperous regions of the world. This phenomenal economic growth illustrates that pollution control and strong economic growth can coincide.



## **Mission**

SCAQMD's mission is to clean the air and protect the health of all residents in the South Coast Air District through practical and innovative strategies. This mission is pursued through a comprehensive program of planning, regulation, education, enforcement, compliance incentives, technical innovation and promoting public understanding of air quality issues. The SCAQMD has implemented a policy of working with regulated businesses to ensure their participation in making the rules which will impact them. This cooperative approach has resulted in greater business support for air that is more healthful to breathe.

To carry out its mission, SCAQMD develops a set of Goals and Priority Objectives which are evaluated and revised annually and presented as part of the budget proposal. The following Draft Goals have been identified as being critical to meeting SCAQMD's Mission for FY 2017-18:

- I. Achieve Clean Air Standards.
- II. Enhance Public Education and Equitable Treatment for All Communities.
- III. Operate Efficiently and Transparently.

These goals are the foundation for SCAQMD's Work Program. Each goal is supported by multiple activities, which target specific areas of program performance.

## **Air Quality**

### **Overview**

The four-county Southern California region, designated for air quality purposes as the South Coast Air Basin (Basin), has some of the highest air pollution levels in the United States. The federal government has designated seven pollutants that are pervasive enough across the nation to warrant federal health standards, called National Ambient Air Quality Standards (NAAQS). Known as "criteria pollutants," these are: ozone (O<sub>3</sub>); nitrogen dioxide (NO<sub>2</sub>); particulates (PM<sub>10</sub>); fine particulates (PM<sub>2.5</sub>); carbon monoxide (CO); lead (Pb); and sulfur dioxide (SO<sub>2</sub>).

In addition, the State of California through the California Air Resources Board (CARB) sets ambient air quality standards for these same pollutants. California's standards are in some cases tighter than the U.S. Environmental Protection Agency's (U.S. EPA) standards, reflecting the conclusion on CARB's part that some of the federal standards are not adequate to protect public health in this region. Toxic compounds also are a potential problem. More toxic pollution is emitted into the air in the Basin than in any other region in California. The Basin's large number of motor

vehicles and small sources, including small businesses and households using ozone-forming consumer products and paints, compounds the problem.

### Air Quality Trends

While our air quality continues to improve, the Basin remains one of the most unhealthful areas in the nation in terms of air quality. Ozone levels have fallen by more than three-quarters since peaks in the mid-1950s. U.S. EPA revised and strengthened the 8-hour ozone NAAQS, effective December 28, 2015, from concentrations exceeding 75 parts-per-billion (ppb) to concentrations exceeding 70 ppb. In 2016, the new 2015 8-hour ozone NAAQS was exceeded in the Basin on 132 days and the former 2008 ozone NAAQS was exceeded on 106 days based on preliminary data. The 2015 ozone NAAQS was exceeded in the Basin on 113 days in 2015, the lowest number ever recorded, and 123 days in 2014. The increase in ozone exceedance days in 2016 is attributed to enhanced photochemical ozone formation through the summer due to persistent weather patterns that limited vertical mixing and warmed the lower atmosphere. While the ozone control strategy continued to reduce precursor emissions from sources in the Basin in 2016, ozone-forming emissions transported from several long-term, large wildfires in southern and central California in the summer may have also played a role in the increase of exceedance days. The maximum observed ozone levels also show some year-to-year variability, but have generally been decreasing over the years. The highest 8-hour ozone level in the preliminary 2016 data was 122 ppb, compared to 127 ppb in 2015 and 110 ppb in 2014. The value from 2014 was the Basin's lowest recorded annual maximum 8-hour ozone concentration to date.

PM<sub>2.5</sub> levels have decreased dramatically in the Basin since 1999; however, design value concentrations are still above the current annual 24-hour NAAQS. Effective March 18, 2013, U.S. EPA strengthened the annual average PM<sub>2.5</sub> standard from 15 µg/m<sup>3</sup> to 12 µg/m<sup>3</sup>, while retaining the 24-hour PM<sub>2.5</sub> NAAQS of 35 µg/m<sup>3</sup>. In 2016, the 24-hour PM<sub>2.5</sub> NAAQS was exceeded on 10 days based on preliminary filter data with near-road measurements included. This was a dramatic improvement over the 25 days that exceeded the PM<sub>2.5</sub> NAAQS in 2015 and the lowest ever recorded in the Basin. While the 2015 PM<sub>2.5</sub> measurements were strongly influenced by the long-term effects of the drought in California, the 2016 data was influenced by an increase in wintertime storm systems that improved ventilation in the Basin on many days in the winter months when the highest PM<sub>2.5</sub> concentrations typically occur. The Basin's peak annual average PM<sub>2.5</sub> level in 2016, 14.0 µg/m<sup>3</sup> (preliminary data) was a little higher than the 2015 value, 13.3 µg/m<sup>3</sup>, which was the lowest annual average since PM<sub>2.5</sub> monitoring started in 1999. In 2016, quarterly PM<sub>2.5</sub> averages for the second and third quarters were above normal for recent years, likely due to the impact of smoke transported from numerous fires burning in Southern and Central California during the summer months. However, no days exceeded the 24-hour PM<sub>2.5</sub> NAAQS in the summer of 2016, except for July 5 due to emissions from Independence Day fireworks.

In 2006, U.S. EPA rescinded the annual federal standard for PM<sub>10</sub> but retained the 24-hour standard. U.S. EPA re-designated the Basin as attainment of the health based standard for PM<sub>10</sub>, effective July 26, 2013. Ambient levels of PM<sub>10</sub> in the Basin have continued to meet the federal 24-hour PM<sub>10</sub> NAAQS through 2016.

In November 2008, U.S. EPA revised the lead NAAQS from a 1.5 µg/m<sup>3</sup> quarterly average to a rolling 3-month average of 0.15 µg/m<sup>3</sup> and added new near-source monitoring requirements. The Los Angeles County portion of the Basin has been designated non-attainment for lead due to monitored concentrations near one facility. However, starting with the 3-year 2012-2014 design value, the Basin has met the lead standard. A re-designation request to U.S. EPA is pending.

Nitrogen dioxide, sulfur dioxide, and carbon monoxide levels have improved in the Basin and are in full attainment of the NAAQS. In 2007, U.S. EPA formally re-designated the Basin to attainment of the carbon monoxide NAAQS. Maximum levels of carbon monoxide in the Basin have been consistently less than one-third of the federal standards since 2004. In 2010, U.S. EPA revised the NO<sub>2</sub> 1-hour standard to a level of 100 ppb and the SO<sub>2</sub> 1-hour standard to a level of 75 ppb. In 2016, all sites in the Basin remained in attainment of these NAAQS.

### Mandates

The SCAQMD is governed and directed by several state laws and a comprehensive federal law that provide the regulatory framework for air quality management in the Basin. These laws require SCAQMD to take prescribed steps to improve air quality.

Generally speaking, SCAQMD is responsible for stationary sources such as factories and businesses. CARB and U.S. EPA are primarily responsible for motor vehicles. SCAQMD and CARB share responsibilities with respect to area sources. SCAQMD and the Southern California Association of Governments (SCAG) share some responsibilities with CARB regarding some aspects of mobile source emissions related to transportation and land use. Control of emissions from sources such as airports, harbors, and trains is shared by U.S. EPA, CARB and SCAQMD. Without adequate efforts by CARB and U.S. EPA to control emission sources under their sole authority, it is impossible for the region to reach federal clean air standards.

Under State law, SCAQMD must periodically develop and submit to the State an Air Quality Management Plan (AQMP or Plan) demonstrating how the region will achieve State and Federal ambient air quality standards, or at a minimum demonstrate that all feasible measures are being carried out to meet state air quality standards. Each iteration of the Plan is an update of the previous version. To date, the SCAQMD's Governing Board has adopted Plans demonstrating attainment in 1989, 1991, 1994, 1997, 1999 (amendments to the plan adopted in 1997), 2003, 2007 and 2012. The 2016 AQMP was approved in March 2017. Earlier plans in 1979 and 1982 did not show attainment and predicted continued unhealthy air well into this century. Revisions to the annual PM<sub>2.5</sub> NAAQS, adopted by U.S. EPA in 2012 to further protect public health, lead to the projected attainment of the new annual PM<sub>2.5</sub> NAAQS by 2025. The attainment deadline for the 2006 24-hour PM<sub>2.5</sub> NAAQS is 2019. The 2008 federal 8-hour ozone NAAQS has an attainment deadline of 2032. Attainment designations for the 2015 ozone NAAQS are expected to be finalized in 2018, with State Implementation Plan (SIP) attainment demonstrations likely due in 2021 or 2022. Attainment deadlines for the new ozone NAAQS are still pending, but for an extreme non-attainment area such as the Basin, the attainment deadline is 20 years from the effective date of the designation or approximately 2038.



State Laws include:

- California Clean Air Act (AB 2595) requires air districts in California to adopt plans to expeditiously meet state ambient air quality standards. It mandates that SCAQMD's attainment plans meet several specific requirements including:
  - ◆ a 5% per year reduction in emissions (the plan can achieve less than 5% annual reduction if it includes every feasible measure and an expeditious adoption schedule);
  - ◆ Best Available Control Technology (BACT) for new and modified sources;
  - ◆ Best Available Retrofit Control Technology (BARCT) for existing sources.
- Lewis-Presley Air Quality Management Act (SB 151) specifies additional, more stringent requirements for air quality plans in the Basin. It specifies that SCAQMD has responsibility to prepare the plan in conjunction with SCAG, which must prepare the portions of the plan relating to demographic projections, land use, and transportation programs.
- Air Toxics "Hot Spots" Information & Assessment Act (AB 2588) requires facilities that emit significant quantities of pollutants to prepare health risk assessments describing the impact of toxic contaminants on neighboring areas. If SCAQMD determines that the toxic emissions create a significant risk, the public must be notified, and facilities must reduce emissions to below significant levels.
- Tanner Air Toxics Process (AB 1807) requires CARB to adopt air toxic control measures to limit emissions of toxic air contaminants from classes of industrial facilities. Local air districts are required to enforce these regulations or adopt equally or more stringent regulations of their own.

State law also includes the following measures:

- authorizes SCAQMD to adopt market incentives such as the emissions trading program known as RECLAIM as long as the emitters achieve reductions equivalent to command-and-control regulations;
- requires SCAQMD to establish a program to encourage voluntary participation in projects to increase the use of clean-burning fuels;
- requires SCAQMD to adopt and enforce rules to ensure no net emission increases from stationary sources.

Under the Federal Clean Air Act, SCAQMD must develop and submit to CARB for review, followed by submittal to U.S. EPA, an element of the SIP demonstrating how the Basin will achieve the NAAQS. In the case of ozone, the Plan was required to be submitted by November 15, 1994 and for PM<sub>10</sub> particulate matter, the Plan was required to be submitted by February 8, 1997. Plans for other pollutants were submitted in earlier years. In 1997, U.S. EPA adopted new NAAQS for PM<sub>2.5</sub> and replaced the 1997 1-hour ozone NAAQS with a new standard based on an 8 hour average. The SIPs to attain these federal standards were submitted to U.S. EPA in November, 2007. The SIP to attain the current 2006 24-hour PM<sub>2.5</sub> NAAQS was submitted in early 2013. The SIP to attain the 2008 8-hour ozone standard is expected to be submitted in early 2017 following the March 3, 2017 adoption of the 2016 AQMP by the SCAQMD Governing Board.

The Federal Clean Air Act mandates that sanctions be imposed on an area if a suitable Plan is not adopted and approved by U.S. EPA. These sanctions can include loss of key federal funds and more stringent requirements on new or expanding industries. Specific requirements for SCAQMD's AQMP include stringent requirements plus Lowest Achievable Emission Rate (LAER) and offsets for major new sources. Federal law also requires an operating permit program for major stationary sources, known as Title V, which must be supported by permit fees. In addition, air toxics regulations adopted by U.S. EPA pursuant to Title III must be implemented by SCAQMD.

#### Air Quality Control

Developing solutions to the air quality problem involve highly technical processes and a variety of resources and efforts to meet the legal requirements of California and federal laws.

**Monitoring:** The first step in air quality control is to determine the smog problem by measuring air pollution levels. SCAQMD operates approximately 41 monitoring stations throughout the Basin. These range from fully equipped stations that measure levels of all criteria pollutants, as well as some air toxic pollutant levels, to those which measure a specific pollutant in critical areas. These measurements provide the basis of our knowledge about the nature of the air pollution problem and the data for planning and compliance efforts to address the problem.

**Pollution Sources:** The SCAQMD, in cooperation with CARB and SCAG, estimates the sources of emissions causing the air pollution problem. Nature itself causes a portion of the emissions and must be considered. In general, SCAQMD estimates stationary and natural sources of emissions, SCAG develops the information necessary to estimate population and traffic, and CARB develops the information necessary to estimate mobile and area source emissions using the SCAG traffic data. This data is then consolidated in the AQMP for use in developing the necessary control strategies.

**Air Quality Modeling:** Using air quality, meteorological and emissions models, SCAQMD planners simulate air pollution to demonstrate attainment of the air quality standards and the impacts of sources to local and regional air quality. Due to the nature of air pollution, air quality models can be very complex. Some pollutants are not emitted directly into the air but are products of photochemical reactions in the atmosphere. For example, VOCs mix with nitrogen dioxide (NO<sub>2</sub>) and react in sunlight to form ozone; similarly, nitrogen oxide gases from tailpipes and smokestacks can be transformed into nitrates or particulates (PM<sub>2.5</sub> and PM<sub>10</sub>). The planners thus must take into account transport, land use characteristics and chemical reactions of emissions in the atmosphere to evaluate air quality impacts. Using model output, planners can look at different control scenarios to determine the best strategies to reduce air pollution for the lowest cost.

The considerable data required for these analyses is collected on an ongoing basis by SCAQMD staff. Modeling data is prepared and delivered using a geographic information system (GIS). GIS capability is used to prepare and produce data and spatial analysis maps for various needs by SCAQMD including rulemaking and California Environmental Quality Act (CEQA) document development.

Planning: With emissions data and an air quality model in place, planners can develop possible control strategies and scenarios. SCAQMD focuses most of its effort on stationary source controls. As mentioned earlier, strategies to reduce vehicle miles traveled (VMT) are developed primarily by SCAG, while mobile source control standards are developed primarily by CARB.

Once a plan of emission controls to achieve the NAAQS is outlined, SCAQMD is required to hold multiple public meetings to present the proposed control strategies and receive public input. SCAQMD also conducts a socioeconomic analysis of the strategies. SCAQMD maintains an ongoing and independent advisory group of outside experts for both its air quality modeling and socioeconomic assessment methodologies.

To meet federal air quality standards, the AQMPs and SIP submittals, including the 2016 AQMP, called for significant emissions reductions from projected baseline emissions in order to meet the NAAQS by the federal attainment deadlines (2019 for the 2006 24-hour PM<sub>2.5</sub> NAAQS, 2025 for the 2012 annual PM<sub>2.5</sub> NAAQS, 2023 for the 1979 1-hour ozone NAAQS, 2024 for the 1997 8-hour ozone NAAQS, and 2032 for the 2008 8-hour ozone NAAQS). These combined reductions, while meeting most NAAQS, will still not result in attainment of all California State ambient air quality standards or the revised 2015 8-hour ozone NAAQS. The 2012 AQMP addressed the 24-hour PM<sub>2.5</sub> NAAQS. The 2016 AQMP addresses the 2008 8-hour ozone NAAQS and the 2012 annual PM<sub>2.5</sub> NAAQS, and demonstrates compliance with the requirements for being a “serious” non-attainment area for the 24-hour PM<sub>2.5</sub> NAAQS requirements. SCAQMD will continue to improve the emissions inventories and modeling techniques in order to address the 2015 8-hour NAAQS for the next AQMP revision which has an anticipated adoption in the 2021 or 2022 timeframe.

Rulemaking: The regulatory process, known as rulemaking, takes the concepts of control measures outlined in the AQMP and turns them into proposed rule language. This process involves the following: extensive research on technology; site inspections of affected industries to determine feasibility; typically a year or more of public task force and workshop meetings; in-depth analyses of environmental, social and economic impacts; and thorough review with appropriate Governing Board Committees.

This extensive process of public and policymaker participation encourages consensus in development of rule requirements so that affected sources have an opportunity for input into the rules that will regulate their operations. Once the requirements are developed, the proposed rule, along with an Environmental Assessment and a socioeconomic report, is presented to SCAQMD’s Governing Board at a public hearing. Public testimony is presented and considered by the Board before any rule is adopted. The adopted or amended rules are then submitted to CARB and U.S. EPA for their approval. It is not uncommon for rulemaking to include follow-up implementation studies. These studies may extend one or more years past rule adoption/amendment and prior to rule implementation. Such studies are typically submitted to the Governing Board or appropriate Governing Board Committees.

Enforcement and Education: SCAQMD issues permits to construct and operate equipment to companies to ensure equipment is operated in compliance with adopted rules. Follow-up inspections are made to ensure that equipment is being operated under permit conditions.

Technical Innovation: In the late 1980s, SCAQMD recognized that technological innovation, as well as rule enforcement, would be necessary to achieve clean air standards. Thus the Technology Advancement Office was created to look for and encourage technical innovation to reduce emissions. The California State Legislature supported this effort by providing a \$1 surcharge on every DMV registration fee paid within the Basin. These funds have been matched at a ratio of approximately three-to-one with funds from the private sector to develop new technologies such as low-emission vehicles, low-NO<sub>x</sub> burners for boilers and water heaters, zero-pollution paints and solvents, fuel cells and other innovations.

An additional \$4 vehicle registration fee was authorized by the state legislature in 1990. These fees are administered through SCAQMD with \$1.20 going to SCAQMD for mobile source emissions reductions, \$1.60 subvented directly to cities and counties to support their air quality programs, and \$1.20 to the Mobile Source Air Pollution Reduction Review Committee (MSRC). The MSRC is an outside panel established by state law whose function is to make the decisions on the actual projects to be funded from that portion of the revenue.

Public Education: In the end, SCAQMD's efforts to clean up the air will be successful only to the extent that the public understands air quality issues and supports and participates in our cleanup effort. Thus, SCAQMD strives to involve and inform the public through the Legislative and Public Affairs/Media Office, public meetings, publications, the press, and public service announcements.

## **Budget Synopsis**

The SCAQMD's annual budget is adopted for the General Fund for a fiscal year that runs from July 1 through June 30 of the following year. The period covered by the FY 2017-18 budget is from July 1, 2017 to June 30, 2018. The General Fund budget is the agency's operating budget and is structured by Office and account. The accounts are categorized into three Major Objects: Salaries and Employee Benefits, Services and Supplies, and Capital Outlays. The budget is supplemented with a Work Program which estimates staff resources and expenditures along program and activity lines. A Work Program Output Justification is completed for each Work Program which identifies performance goals, measureable outputs, legal mandates, activity changes and revenue categories.

The annual expenditure and revenue budget for the General Fund is adopted on a modified accrual basis. All annual expenditure appropriations lapse at fiscal year-end if they have not been expended or encumbered. Throughout the year, budget amendments may be necessary to accommodate additional revenues and expenditure needs. Any amendments due to budget increases or transfers between expenditure accounts in different Major Objects must be

approved by SCAQMD's Governing Board. They are submitted to the Governing Board for approval at a monthly Board meeting in the format of a board letter which documents the need for the request and the source of funding for the expenditure. Budget amendments resulting from transfers between expenditure accounts within the same Major Object are approved at the Office level.

SCAQMD does not adopt annual budgets for its Special Revenue Funds. Special Revenue Funds are used to record transactions applicable to specific revenue sources that are legally restricted for specific purposes. All transactions in Special Revenue Funds are approved by the Governing Board on an as needed basis.

### Budget Process

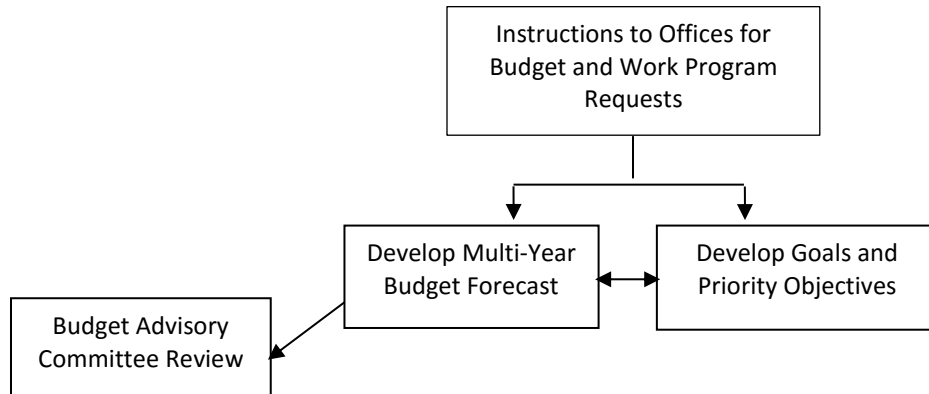
The SCAQMD budget process begins with the Chief Administrative Officer issuing instructions and guidelines to the Offices. Under the guidance of the Executive Officer, the Chief Operating Officer and the Chief Administrative Officer, the Offices also begin establishing Goals and Priority Objectives for the fiscal year. The proposed annual budget and multi-year forecast is then developed by the Offices, Finance, Executive Council, and the Executive Officer based on the Goals and Priority Objectives as well as guidelines issued by the Executive Officer. Each Office submits requests for staffing, select Salary accounts, Services and Supplies accounts, and the Capital Outlays account. The remaining salary and benefit costs are developed by Finance. Capital expenditure requests are reviewed by an in-house committee who prioritizes the requests. Revenue projections are developed by Finance based on input received from the appropriate Offices and incorporating any proposed changes to the fee schedules. This information is integrated into an initial budget request, including a top-level multi-year forecast, and then fine-tuned under the direction of the Executive Officer to arrive at a proposed budget. The public, business community, and other stakeholders have several opportunities to participate in the budget process, up to and at the budget adoption hearing by the Governing Board, including:

- two meetings of the Budget Advisory Committee whose members include various stakeholder representatives
- two public consultation meetings to discuss proposed amendments to Regulation III - Fees and the proposed budget
- a public hearing on the Proposed Draft Budget and Work Program and Proposed Amended Regulation (PAR) III - Fees

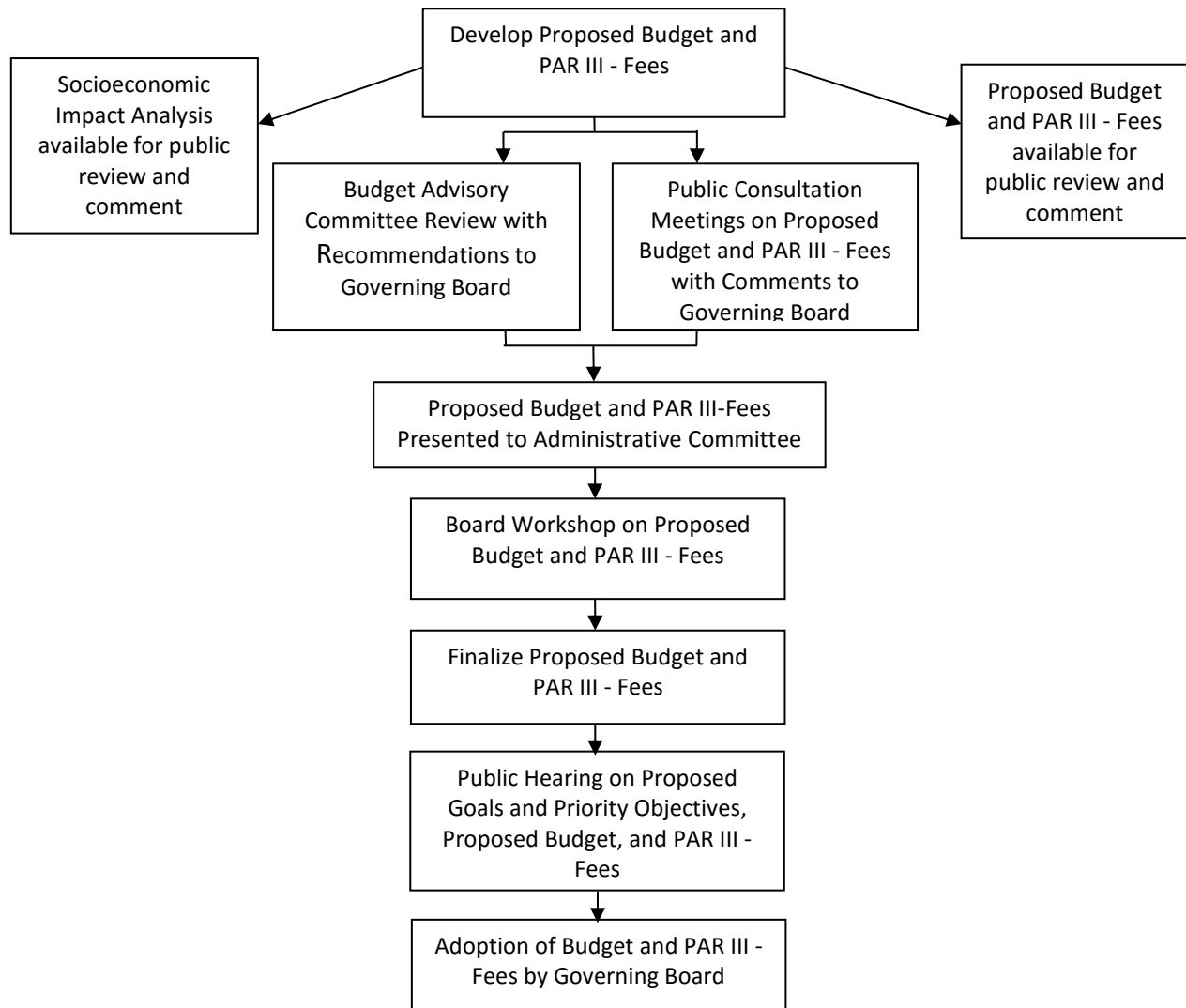
The proposed budget is presented to SCAQMD's Governing Board at a budget workshop and to SCAQMD's Administrative Committee. Any public comments and Budget Advisory Committee recommendations are also submitted to the Governing Board by April 15 of each year. The final proposed budget, including final fee schedules, is adopted by the Governing Board and is in place on July 1 for the start of the new fiscal year.

The following flow charts represent the major milestones and processes that take place in the development of the SCAQMD budget:

### Preliminary Budget Process



### Annual Budget Process



<b>Budget Timeline</b>	
Budget packages distributed to Offices	Dec 7, 2016
Budget submissions received from Offices	Jan 13, 2017
Budget Advisory Committee meeting	Jan 20, 2017
Proposed budget available for public review	April 5, 2017
Budget Advisory Committee meeting on proposed budget and PAR III - Fees	April 6, 2017
Public Consultation Meetings on proposed budget and PAR III - Fees	April 11, 2017; April 18, 2017
Public comments and Budget Advisory Committee recommendations submitted to Governing Board	April 14, 2017; April 25, 2017
Governing Board Budget Workshop	April 21, 2017
Budget presented to Administrative Committee	May 12, 2017
Public Hearing & Governing Board adoption of budget and PAR III - Fees	June 2, 2017

## **Proposed Budget & Work Program**

### **Budget Overview**

The budget for FY 2017-18 proposes expenditures of \$149.9 million and revenues of \$147.5 million, using prior year revenues to supplement FY 2017-18 projected revenues. To compare against prior years, the following table shows SCAQMD's amended budget and actual expenditures for FY 2015-16, adopted and amended budgets for FY 2016-17 and proposed budget for FY 2017-18.

<b>Description</b>	<b>FY 2015-16 Amended</b>	<b>FY 2015-16 Actual</b>	<b>FY 2016-17 Adopted</b>	<b>FY 2016-17 Amended<sup>1</sup></b>	<b>FY 2017-18 Proposed</b>
Staffing	803	-	813	815	825.25
Revenue/Transfers In	\$141.3	\$134.4	\$136.4	\$143.5	\$147.5
Program Costs/Transfers Out	\$147.8	\$138.7	\$141.5	\$150.2	\$149.9

<sup>1</sup> Includes Board approved changes through March 2017

This budget reflects a decrease of approximately \$0.3 million in expenditures from the FY 2016-17 amended budget and a \$8.4 million increase in expenditures from the budget adopted for FY 2016-17. The increase in expenditures from the FY 2016-17 adopted budget can be attributed to increases in retirement costs, salaries associated with new positions, contractual costs, and capital outlays. The FY 2017-18 proposed budget includes 825.25 positions, an increase of 10.25 positions over the FY 2016-17 amended budget. This increase in positions will augment enforcement, monitoring and analysis, rulemaking, and communications efforts. Four positions are funded by mobile source-related incentive programs and by Air Toxics revenue. The 0.25 FTE

is to provide three months of critical overlap and to provide service continuity before the Assistant Deputy Executive Officer of Information Management retires.

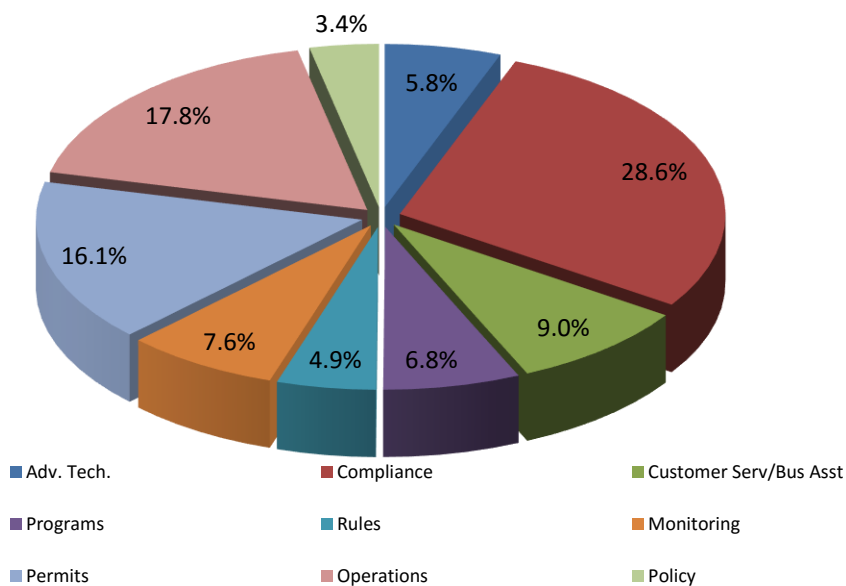
## Expenditures

### Work Program

SCAQMD expenditures are organized into nine Work Program Categories: Advance Clean Air Technology; Ensure Compliance with Clean Air Rules; Customer Service and Business Assistance; Develop Programs to Achieve Clean Air; Develop Rules to Achieve Clean Air; Monitoring Air Quality; Operational Support; Timely Review of Permits; and Policy Support. Each category consists of a number of Work Programs, or activities, which are classified according to the nature of the activity being performed.

Each Work Program ties to the goals and objectives of the agency and identifies resources, performance measures/outputs and legal mandates. A complete description of each program category along with a detailed work program sort by program is included in the Goals and Priority Objectives and Work Program section. The pie chart that follows represents the budgeted expenditures by Program Category for FY 2017-18.

**Work Program Category Expenditures**





The following table compares SCAQMD Work Program expenditures by category for the FY 2016-17 adopted budget and FY 2017-18 proposed budget.

<b>Work Program Categories</b>	<b>FY 2016-17 Adopted Budget</b>	<b>FY 2017-18 Proposed Budget</b>
Advance Clean Air Technology	\$ 7,093,418	\$ 8,661,899
Ensure Compliance with Clean Air Rules	43,314,046	42,802,490
Customer Service and Business Assistance	12,217,648	13,437,515
Develop Programs to Achieve Clean Air	10,419,982	10,184,322
Develop Rules to Achieve Clean Air	6,387,801	7,354,657
Monitoring Air Quality	10,458,169	11,398,567
Operational Support	25,899,412	26,747,503
Timely Review of Permits	20,952,521	24,151,356
Policy Support	4,784,698	5,140,597
<b>Total</b>	<b>\$ 141,527,695</b>	<b>\$ 149,878,906</b>

#### Account Categories

The following table compares the FY 2016-17 adopted budget and the FY 2016-17 amended budget to the proposed budget for FY 2017-18 by account category. The FY 2016-17 amended budget includes the Board-approved mid-year adjustments through March 2017.

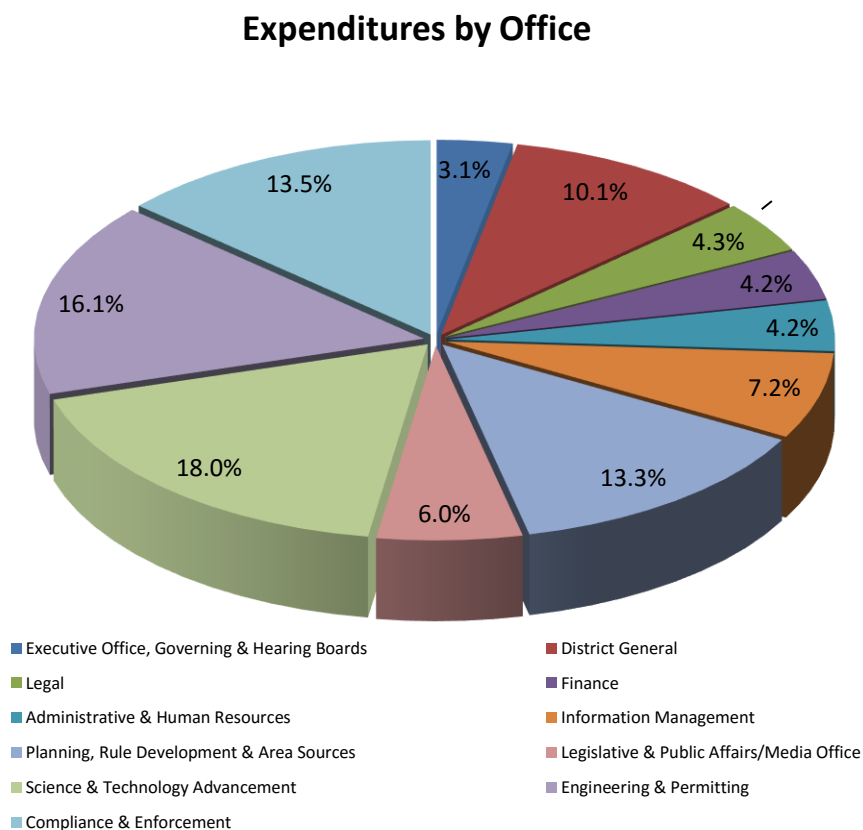
<b>Account Description</b>	<b>FY 2016-17 Adopted Budget</b>	<b>FY 2016-17 Amended Budget</b>	<b>FY 2017-18 Proposed Budget</b>
Salaries/Benefits	\$ 114,841,998	\$ 114,927,674	\$ 119,860,494
Insurance	1,317,400	1,362,400	1,317,400
Rents	462,973	576,462	498,154
Supplies	2,630,504	3,391,594	2,777,621
Contracts and Services	8,989,091	12,762,460	10,515,792
Maintenance	1,420,861	1,727,108	1,687,193
Travel/Auto Expense	852,960	1,034,937	864,520
Utilities	2,213,288	2,140,448	2,213,288
Communications	701,000	759,260	702,000
Capital Outlays	850,000	4,046,251	1,950,717
Other	1,053,128	1,276,927	1,302,213
Debt Service	6,194,492	6,194,492	6,189,514
<b>Total</b>	<b>\$ 141,527,695</b>	<b>\$ 150,200,013</b>	<b>\$ 149,878,906</b>

As mentioned previously, the proposed budget for FY 2017-18 represents an approximately \$0.3 million decrease in expenditures from the FY 2016-17 amended budget. The FY 2016-17

amended budget includes mid-year increases associated with the purchase of air monitoring and laboratory analysis instruments, field platforms and software, development of online permitting modules, strategic consulting for the AQMP, development of a web-based application system for the Enhanced Fleet Modernization Program, the pursuit of environmental justice interests and policies, and grant related expenditures offset by revenue.

### Office Categories

The following pie chart represents budgeted expenditures by Office for FY 2017-18.

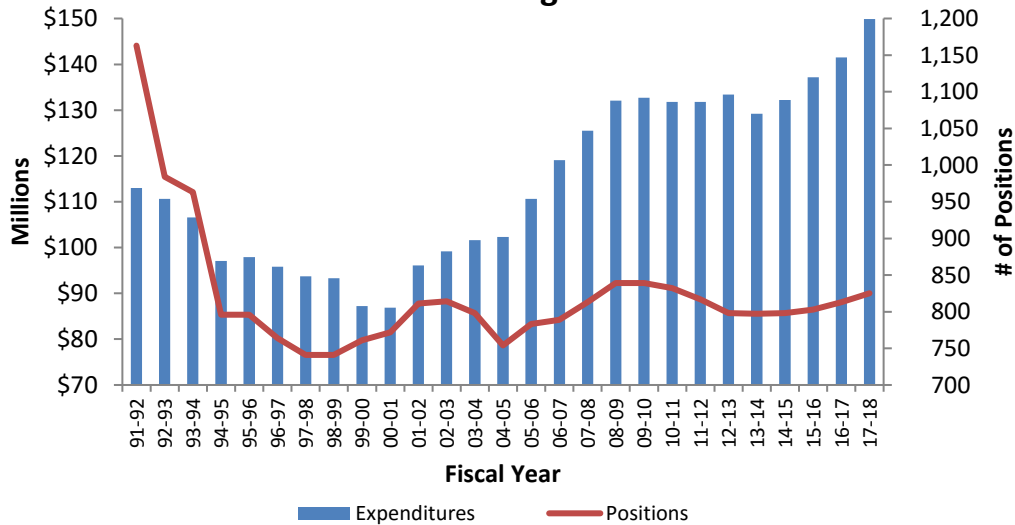


### Budget Changes

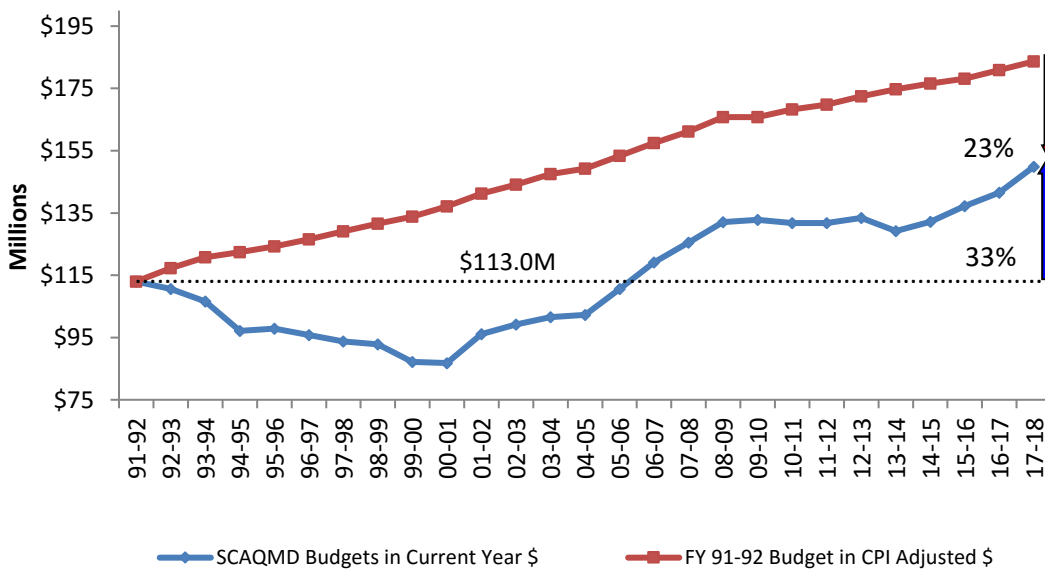
Over the years, SCAQMD has focused on streamlining many of its operations while still meeting its program commitments, despite new federal and state mandates and increased workload complexity. The focus has been on reducing expenditures in the Major Object of Services and Supplies and maximizing the efficient use of staff resources to enable select vacant positions to remain vacant, be deleted or be unfunded. This effort has resulted in reduced program costs and is reflected in the following charts showing SCAQMD's staffing and budget levels starting in FY 1991-92 when staffing was at 1,163 FTEs. The proposed budget for FY 2017-18 reflects a staffing level of 825.25 FTEs. This staffing level is 29% (337.75 FTEs) below the FY 1991-92 level. The FY

2017-18 proposed budget is 33% higher when compared to the FY 1991-92 adopted budget of \$113 million. However, after adjusting the FY 1991-92 adopted budget for CPI over the last 26 years, the FY 17-18 proposal is 23% lower.

### Changes in Expenditure Budget FY 1991-92 through FY 2017-18



### Inflation Impact on SCAQMD Budgets FY 1991-92 through FY 2017-18



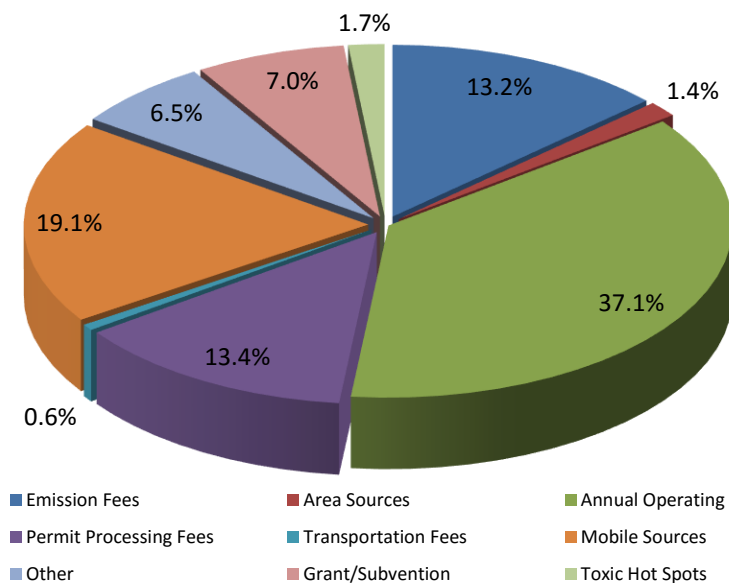
CPI adjustment based on California Consumer Price Index for the preceding Calendar Year

## Revenues

### Revenue Categories

Each year, in order to meet its financial needs, the SCAQMD Governing Board adopts a budget supported by a system of annual operating and emission fees, permit processing fees, toxic “hot spots” fees, area sources fees, source test/analysis fees, and transportation plan fees. In FY 2017-18, these fees are projected to generate approximately \$100.1 million or about 68% of SCAQMD revenues; of this \$100.1 million, \$92.7 million or 63% of SCAQMD’s revenues are from stationary sources. Other sources, which include penalties/settlements, Hearing Board fees, interest, and miscellaneous income, are projected to generate approximately 6% of total revenues in FY 2017-18. The remaining 26% of revenue is projected to be received in the form of federal grants, California Air Resource Board (CARB) subvention, and California Clean Air Act motor vehicle fees. Beginning with its Fiscal Year 1978-79 Budget, the SCAQMD became a fee supported agency no longer receiving financial support from property taxes. The FY 2017-18 proposed revenue budget includes a proposed CPI fee adjustment of 2.5%, an additional 16% increase to Title V annual operating permit renewal and permit processing fees to more fully recover Title V program costs, and a 4% increase to non-Title V annual operating permit renewal and permit processing fees to better align program costs with revenue.

**Revenues by Major Category**



The following table compares the FY 2016-17 adopted revenue budget and the FY 2016-17 amended revenue budget to the proposed revenue budget for FY 2017-18. The FY 2016-17 amended revenue budget includes Board-approved mid-year changes through March 2017.

<b>Revenue Description</b>	<b>FY 2016-17 Adopted Budget</b>	<b>FY 2016-17 Amended Budget</b>	<b>FY 2017-18 Proposed Budget</b>
Annual Operating Emission Fees	\$ 19,859,100	\$ 19,859,100	\$ 19,480,550
Annual Operating Permit Renewal Fees	48,565,400	48,565,400	53,493,420
Permit Processing Fees	16,771,480	16,771,480	19,693,540
Portable Equipment Registration Program	1,277,420	1,277,420	1,200,000
Area Sources	2,549,180	2,549,180	2,152,500
Grant/Subvention	10,362,130	13,295,493	10,397,650
Mobile Sources	25,724,780	28,245,999	28,199,250
Transportation Programs	860,520	860,520	861,360
Toxic Hot Spots	2,619,510	2,769,510	2,488,380
Other <sup>1</sup>	7,350,970	7,357,610	7,471,470
Transfers In	505,790	1,980,422	2,072,190
<b>Total</b>	<b>\$ 136,446,280</b>	<b>\$ 143,532,134</b>	<b>\$ 147,510,310</b>
<sup>1</sup> Includes revenues from Interest, Lease Income, Source Testing, Hearing Board, Penalties/Settlements, Subscriptions, and Other.			

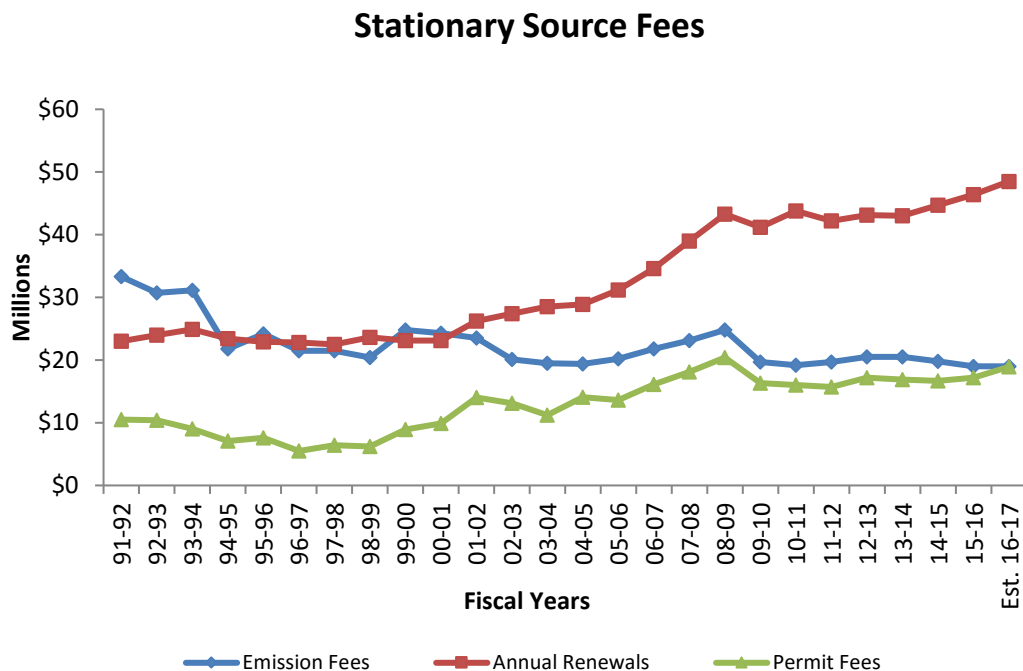
Over the past two decades, total permit fees (including permit processing, annual operating permit, and annual emissions-based fees) collected from stationary sources has increased by about 29% from \$66.8 million in FY 1991-92 to \$86.3 million (estimated) in FY 2016-17. When adjusted for inflation however, stationary source revenues have decreased by 24% over this same period.

Mobile source revenues that are subvented to the SCAQMD by the Department of Motor Vehicles (DMV) are projected to increase slightly from the FY 2016-17 budgeted amounts based on vehicle registration information from the DMV and recent revenue received. In addition, this category reflects reimbursements of incentive programs (Clean Fuels, Carl Moyer, and Prop 1B) whose contract activities and revenues are recorded in special revenue funds outside the General Fund. These incentive program costs incurred by the General Fund are reimbursed to the General Fund from the various special revenue funds (subject to any administrative caps) and are reflected under the Mobile Source revenue category.

Revenues from the federal government, (Environmental Protection Agency, Department of Homeland Security, and Department of Energy) are projected to stay flat in FY 2017-18 from FY 2016-17 budgeted levels reflecting little change in the amount of federal dollars from one-time and on-going grants in support of air quality efforts. However, it is recognized that actual revenues may be impacted by potential changes in federal funding priorities in the form of lower

grant revenue received through U.S. EPA grants. State Subvention funding is expected to remain at the current level (reduced approximately 35% from FY 2001-02) for FY 2017-18.

The following graph tracks actual stationary source revenues by type of fee from FY 1991-92 (when CPI limits were placed on SCAQMD fee authority) to estimated revenues for FY 2016-17.



## Debt Structure

### Pension Obligation Bonds

These bonds were issued jointly by the County of San Bernardino and the SCAQMD in December 1995. In June 2004 the SCAQMD went out separately and issued pension obligation bonds to refinance its respective obligation to the San Bernardino County Employee's Retirement Association (SBCERA) for certain amounts arising as a result of retirement benefits accruing to members of the Association.

The annual payment requirements under these bonds are as follows:

Year Ending June 30	Principal	Interest	Total
2018	\$ 3,432,798	\$ 3,756,716	\$ 7,189,514
2019	3,553,110	3,637,290	7,190,400
2020	3,686,640	3,503,982	7,190,622
2021	3,840,443	3,353,106	7,193,549
2022-2024	11,796,881	3,653,994	15,450,875
Total	\$ 26,309,872	\$ 17,905,088	\$ 44,214,960

## Fund Balance

The SCAQMD is projecting an Unreserved (Unassigned) Fund Balance for June 30, 2018 of \$27,902,928 in addition to the following Reserved and Unreserved Designated Fund Balances for FY 2017-18.

Classification	Reserves/Unreserved Designations	Amount
Committed	Reserve for Encumbrances	\$ 7,723,000
Nonspendable	Reserve for Inventory of Supplies	80,000
	Unreserved Designations:	
Assigned	For Enhanced Compliance Activities	883,018
Assigned	For Other Post Employment Benefit (OPEB) Obligations	2,952,496
Assigned	For Permit Streamlining	2, 288,385
Assigned	For Self-Insurance	2,000,000
Assigned	For Unemployment Claims	80,000
Total Reserved & Unreserved Designations		\$ 16,006,899

Reserves represent portions of the fund balance set aside for future use and are therefore not available for appropriation. These funds are made-up of encumbrances which represent the estimated amount of current and prior years' unperformed purchase orders and contract commitments at year-end; and inventory which represents the value at cost of office, computer, cleaning and laboratory supplies on hand at year-end.

Unreserved Designations in the fund balance indicate plans for use of financial resources in future years. The Designation for Enhanced Compliance Activities provides funding for inspection/compliance efforts. The Designation for Other Post Employment Benefit Obligations (OPEB) provides funding to cover the current actuarial valuation of the inherited OPEB obligation for long-term healthcare costs from the County of Los Angeles resulting from the consolidation of the four county Air Pollution Control Districts (APCDs). The Designation for Permit Streamlining was established to fund program enhancements to increase permitting efficiency and customer service. The SCAQMD is self-insured for general liability, workers' compensation, automobile liability, premises liability, and unemployment.

## Long-Term Projection

The SCAQMD continues to face a number of challenges in the upcoming years, including continued higher operating costs due to increased retirement costs and the need for major infrastructure improvement projects for an aging headquarters building while meeting air quality goals, permit processing targets, and growing program commitments. In April 2017, SBCERA took action to lower their investment return assumptions from 7.5% to 7.25% and modify their mortality assumptions, which will significantly impact the level of expenditures beginning in FY

2018-19. A primary uncertainty continues to be the degree of fluctuations the financial markets will take over the next few years which will determine the performance of our retirement investments and other investments. Another uncertainty is any legislative action that may impact the level of federal and state funding from grant awards and subvention funds. Cost recovery within the constraints of Prop 26 is a third uncertainty as SCAQMD strives to balance program operating expenses with revenues collected from fees. In order to face these challenges, SCAQMD has a five year plan in place that provides for critical infrastructure improvement projects, maintains a stable vacancy rate in order to maximize cost efficiency, better aligns program revenues with costs, and strives to keep the percentage of unreserved fund balance to revenue within the Governing Board mandate of 20%. The following chart, outlining SCAQMD's financial projection over this time period, shows the agency's commitment to meet these challenges and uncertainties while protecting the health of the residents within the SCAQMD boundaries and remaining sensitive to business. While not included in the Five Year Projection, starting in FY 2022-23, SCAQMD will realize a \$3.1M savings in Pension Obligation Bond payments.

Fiscal 2016-17 Estimate and Five Year Projection (\$ in Millions)						
	FY 16-17 Estimate	FY 17-18 Proposed	FY 18-19 Projected	FY 19-20 Projected	FY 20-21 Projected	FY 21-22 Projected
STAFFING		825.25	825	825	825	825
REVENUES/TRANSFERS IN*	\$146.5	\$147.5	\$151.5	\$151.1	\$151.6	\$152.8
EXPENDITURES/TRANSFERS OUT	\$145.2	\$149.9	\$155.5	\$155.1	\$156.1	\$156.8
Change in Fund Balance	\$1.3	-\$2.4	-\$4.0	-\$4.0	-\$4.5	-\$4.0
UNRESERVED FUND BALANCE (at year-end)	\$38.5	\$36.1	\$32.1	\$28.2	\$23.7	\$19.6
% of REVENUE	26%	24%	21%	19%	16%	13%
*Includes projected CPI fee increase of 2.5% for FY 2017-18 with an additional 16% for Title V annual operating permit renewal and permit processing fees and an additional 4% for non-Title V annual operating permit renewal and permit processing fees; a CPI of 2.6% for FY 2018-19 with an additional 16% for Title V annual operating permit renewal and permit processing fees and an additional 4% for non-Title V annual operating permit renewal and permit processing fees; a CPI of 2.4% for FY 2019-20; and a CPI of 2.3% for FY 2020-21 and FY 2021-22.						

As part of the Five Year Projection, SCAQMD details out projected building maintenance and capital outlay improvement projects for its headquarters building. These projects are outlined in the following chart. In addition, the Infrastructure Improvement Fund has been created with unanticipated one-time revenues from the General Fund for many of the capital outlay building improvement projects. The projects proposed from the Infrastructure Improvement Fund



include upgrading the Energy Management System, finish replacing the centrifugal chillers and cooling towers, and replacing the Liebert air conditioning units in the Computer Room.

<b>GENERAL FUND POTENTIAL BUILDING MAINTENANCE and CAPITAL OUTLAY PROJECTS FY 2017-18 through 2021-22</b>
Refurbish Restroom and Copy/Coffee Room Sinks and Counter Tops
Renovate Irrigation and Upgrade Controllers
Repaint Building Interior
Refurbish/Replace Restroom Side Panels
Replace Cooling Towers (2) and Chillers (2)
Replace Liebert AC Units - Computer Room (6)
Replace Gaylord Air Scrubbers (2) - Cafeteria
Covert Pneumatic Controls to Direct Digital Controls
Replace Aging Kitchen Equipment
Recoat Roofing Surface - District Headquarters
Repair Parking Log and Repaint Parking Stalls and Curbs
Repair and Re-coat Parking Structure Deck
Replace VCT Tiles (Various Areas)
Repaint and Wallpaper Conference Center
Replace Air Handler Fan Walls
Upgrade Energy Management System
Replace Ceiling Tiles - Various Floors
Convert Fluorescent Office Lighting to LED
Upgrade Electric Vehicle Charger and Support System
Replace Carpet – Floors 3 & 4
Replace Roof – Child Care Center
Renovate Third Floor North
Modernize Elevator Equipment

SUMMARY OF FISCAL YEAR 2017-18 PROPOSED BUDGET				
	FY 2016-17 Adopted Budget	FY 2016-17 Amended Budget <sup>1</sup>	FY 2016-17 Estimate <sup>2</sup>	FY 2017-18 Proposed
<b>Funding Sources</b>				
Revenue	\$ 135,940,490	\$ 142,050,862	\$ 145,260,004	\$ 145,438,120
Transfers-In	505,790	1,481,272	1,282,557	2,072,190
Total Financing Sources	\$ 136,446,280	\$ 143,532,134	\$ 146,542,560	\$ 147,510,310
<b>Funding Uses</b>				
Salaries & Employee Benefits	\$ 114,841,998	\$ 114,927,674	\$ 111,665,805	\$ 119,860,494
Services & Supplies	25,835,697	31,226,088	29,716,593	28,067,695
Capital Outlays	850,000	4,046,251	3,850,652	1,950,717
Transfers-Out	-	-	-	-
Total Funding Uses	\$ 141,527,695	\$ 150,200,013	\$ 145,233,050	\$ 149,878,906

Fund Balances -Reserves & Unreserved Designations	Classification	Projected June 30, 2017	Projected June 30, 2018
Reserve for Encumbrances	Committed	\$ 7,583,000	\$ 7,723,000
Reserve for Inventory of Supplies	Nonspendable	80,000	80,000
Designated for Enhanced Compliance Activities	Assigned	883,018	883,018
Designated for Litigation/Enforcement	Assigned	-	-
Designated for Other Post Employment Benefit (OPEB) Obligations	Assigned	2,952,496	2,952,496
Designated for Permit Streamlining	Assigned	288,385	2,288,385
Designated for Self-Insurance	Assigned	2,000,000	2,000,000
Designated for Unemployment Claims	Assigned	80,000	80,000
Total Reserves & Unreserved Designations		\$ 13,866,899	\$ 16,006,899
Unassigned Fund Balance	Unassigned	\$ 32,301,524	\$ 27,902,928
Total Fund Balances		\$ 46,168,423	\$ 43,909,827

<sup>1</sup> The FY 16-17 Amended Budget includes mid-year changes through March 2017.

<sup>2</sup> Includes estimated encumbrances of \$6,130,000 which will be applicable to the fiscal year ending June 30, 2017.

ANALYSIS OF PROJECTED JUNE 30, 2017 FUND BALANCE			
Fund Balances as of June 30, 2016			
Reserves	\$	6,982,806	
Designated		6,203,899	
Unassigned		31,006,208	
Total Fund Balances, June 30, 2016:	\$		44,192,913
Add Excess Fiscal Year 2016-17 Revenues over Expenditures:			
Revenues	\$	146,542,560	
Expenditures <sup>1</sup>		139,103,050	
Sub-Total:	\$		7,439,510
Deduct Decrease in Encumbrances Open on June 30, 2016:			(5,464,000)
Deduct Projected FY 2016-17 Transfers Out to Other Funds			-
Total Projected Fund Balances, June 30, 2017:	\$		46,168,423
Fund Balances (Projected) at June 30, 2017			
Reserve for Encumbrances	\$	7,583,000	
Reserve for Inventory of Supplies		80,000	
Designated for Enhanced Compliance Activities		883,018	
Designated for Litigation/Enforcement		-	
Designated for Other Post Employment Benefit (OPEB) Obligations		2,952,496	
Designated for Permit Streamlining		288,385	
Designated for Self-Insurance		2,000,000	
Designated for Unemployment Claims		80,000	
Unassigned		32,301,524	
Total Projected Fund Balances, June 30, 2017	\$		46,168,423
Note: This analysis summarizes the estimated amount of funds that will be carried into FY 2016-17.			
<sup>1</sup> Expenditures do not include estimated \$6,130,000 encumbrances for the Fiscal Year ended June 30, 2017.			

SCHEDULE OF AVAILABLE FINANCING AND PROPOSED FISCAL YEAR 2017-18 RESERVES AND DESIGNATIONS		
Fund Balances	\$ 46,168,423	
Emission Fees	19,480,550	
Annual Renewal Fees	53,493,420	
Permit Processing Fees	19,693,540	
Portable Equipment Registration Program	1,200,000	
State Subvention	3,945,090	
Federal Grant	6,452,560	
Interest Revenue	332,060	
Lease Revenue	136,540	
Source Test/Analysis Fees	774,900	
Hearing Board Fees	307,500	
Penalties and Settlements	5,000,000	
Area Sources	2,152,500	
Transportation Programs	861,360	
Mobile Sources/Clean Fuels	28,199,250	
Air Toxics "Hot Spots"	2,488,380	
Other Revenues/Transfers In	2,992,660	
Total Funds		\$ 193,678,733
Less Proposed Fiscal Year 2017-18. Reserves and Designations:		
Reserve for Encumbrances	\$ 7,723,000	
Reserve for Inventory of Supplies	80,000	
Designated for Enhanced Compliance Activities	883,018	
Designated for Litigation/Enforcement	-	
Designated for Other Post Employment Benefit (OPEB) Obligations	2,952,496	
Designated for Permit Streamlining	2,288,385	
Designated for Self-Insurance	2,000,000	
Designated for Unemployment Claims	80,000	
Total Proposed Reserves and Designations:		\$ 16,006,899
Available Financing:		\$ 177,671,834

ANALYSIS OF PROJECTED JUNE 30, 2018 FUND BALANCE		
Fund Balances as of June 30, 2017		
Reserves	\$	7,663,000
Designated		6,203,899
Unassigned		32,301,524
Total Fund Balances, June 30, 2017:	\$	46,168,423
Add Excess Fiscal Year 2017-18 Revenues over Expenditures:		
Revenues	\$	147,510,310
Expenditures <sup>1</sup>		143,778,906
Sub-Total:	\$	3,731,404
Deduct Decrease in Encumbrances Open on July 1, 2017:		(5,990,000)
Total Projected Fund Balances, June 30, 2018:	\$	43,909,827
Fund Balances (Projected) Fiscal Year 2017-18:		
Reserve for Encumbrances	\$	7,723,000
Reserve for Inventory of Supplies		80,000
Designated for Enhanced Compliance Activities		883,018
Designated for Litigation/Enforcement		-
Designated for Other Post Employment Benefit (OPEB) Obligations		2,952,496
Designated for Permit Streamlining		2,288,385
Designated for Self-Insurance		2,000,000
Designated for Unemployment Claims		80,000
Unassigned		27,902,928
Total Projected Fund Balances, June 30, 2018	\$	43,909,827
<sup>1</sup> Expenditures do not include estimated \$6,100,000 encumbrances for the Fiscal Year ended June 30, 2018.		

Revenue Comparison				
Revenue Account	FY 2015-16 Actual	FY 2016-17 Budget	FY 16-17 Estimate	FY 17-18 Proposed
Emission Fees	\$ 18,984,919	\$ 19,859,100	\$ 19,022,757	\$ 19,480,550
Annual renewal Fees	46,380,074	48,565,400	48,452,801	53,493,420
Permit Processing Fees	17,239,759	16,771,480	18,837,116	19,693,540
Portable Equipment Registration Program	1,212,719	1,277,420	1,353,070	1,200,000
State Subvention	3,944,602	3,947,390	3,947,390	3,945,090
State Grant	2,884,368	-	-	-
Federal Grant	7,105,975	6,414,740	6,878,026	6,452,560
Interest Revenue	435,773	332,060	332,060	332,060
Lease Revenue	141,195	136,540	160,556	136,540
Source Test/Analysis Fees	683,328	774,140	714,812	774,900
Hearing Board Fees	163,960	307,200	487,925	307,500
Penalties and Settlements	5,704,685	5,000,000	11,463,815	5,000,000
Area Sources	2,226,172	2,549,180	2,549,180	2,152,500
Transportation Programs	891,991	860,520	823,900	861,360
Mobile Sources/Clean Fuels	21,967,629	25,724,780	26,878,718	28,199,250
Air Toxics "Hot Spots"	2,373,579	2,619,510	2,500,239	2,488,380
Other Revenues/Transfers In	2,064,188	1,306,820	2,140,194	2,992,660
Total Revenue	\$ 134,404,917	\$ 136,446,280	\$ 146,542,560	\$ 147,510,310

## EXPLANATION OF REVENUE SOURCES

### **Annual Operating Emissions Fees**

The Lewis-Presley Air Quality Management Act (Health & Safety Code Section 40400-40540) authorizes the SCAQMD to collect fees for permitted sources to recover the costs of District programs related to these sources. (Health & Safety Code 40410(b)). The SCAQMD initiated an annual operating emissions fees program in January 1978. As the program currently exists, all permitted facilities pay a flat fee for up to four tons of emissions. In addition to the flat fee, facilities that emit four tons or greater (from both permitted and unpermitted equipment) of any organic gases, specific organics, nitrogen oxides, sulfur oxides, or particulate matter, or 100 tons per year or greater of carbon monoxide, also pay fees based on the facility's total emissions. These facilities pay for emissions from permitted equipment as well as emissions from unpermitted equipment and processes which are regulated, but for which permits are not required, such as solvent use. In addition, a fee-per-pound is assessed on the following toxic air contaminants and ozone depleters: ammonia; asbestos; benzene; cadmium; carbon tetrachloride; chlorinated dioxins and dibenzofurans; ethylene dibromide; ethylene dichloride; ethylene oxide; formaldehyde; hexavalent chromium; methylene chloride; nickel; perchloroethylene; 1,3-butadiene; inorganic arsenic; beryllium; polynuclear aromatic hydrocarbons (PAHs); vinyl chloride; lead; 1,4-dioxane; trichloroethylene; chlorofluorocarbons (CFCs); and 1,1,1-trichloroethane. The rates are set forth in SCAQMD Rule 301.

*FY 2017-18 Proposed Budget:* The non-RECLAIM emissions are based on Annual Emission Report (AER) data for Calendar Year 2015. The RECLAIM NO<sub>x</sub> and SO<sub>x</sub> emission projection is based on holdings according to the RECLAIM Trading Credit (RTC) listing. The flat emission fees are projected based on the number of active facilities with at least one permit. A 2.5% CPI increase is included.

### **Annual Operating Permit Renewal**

State law authorizes the SCAQMD to have an annual permit renewal program and authorizes fees to recover the costs of the program (Health & Safety Code Section 42300; 40510(b)). The annual operating permit renewal program, initiated by the SCAQMD in February 1977, requires that all active permits be renewed on an annual basis upon payment of annual renewal fees. The annual renewal rates are established in SCAQMD Rule 301 and are based on the type of equipment, which is related to the complexity of related compliance activity. For basic equipment (not control equipment) the operating fee schedule also corresponds to some extent to the emission potential of the equipment. Along with annual operating emissions fees, annual operating permit renewal fees are intended to recover the costs of programs such as SCAQMD's compliance program, planning, rule making, monitoring, testing, source education, public outreach, civil enforcement, including the SCAQMD's Hearing Board, and stationary and area source research projects.

*FY 2017-18 Proposed Budget:* The projection is based on an estimated number of permits at the various equipment fee schedules. A 2.5% CPI increase is included. Also included is a 16% increase for Title V annual operating permit renewal fees and a 4% increase in non-Title V annual operating permit renewal fees.

## EXPLANATION OF REVENUE SOURCES

### **Permit Processing Fees**

Under the Health & Safety Code 42300, SCAQMD may adopt and implement a program requiring that before the construction or operation of any equipment which emits or controls air pollution in SCAQMD's jurisdictional boundaries, a permit to construct and to operate must be obtained from SCAQMD. SCAQMD has adopted rules requiring such permits, to ensure that equipment in SCAQMD's jurisdictional boundaries is in compliance with SCAQMD Rules and Regulations but exempts certain equipment which is deemed to have de minimis emissions (Rule 219). Permit fees are authorized by state law to recover the reasonable costs of the permit program involving permitting, planning, enforcement, and monitoring related activities. Permit processing fees support the permit processing program and the fee rate schedules for the different equipment categories are based on the average time it takes to process and issue a permit. Each applicant, at the time of filing, pays a permit processing fee which partially recovers the costs for normal evaluation of the application and issuance of the permit to construct and permit modifications. This category also includes fees charged to partially recover the costs of evaluation of plans, including but not limited to Rule 403 dust control plans, and Rule 1118 flare monitoring plans. The permit processing fees also cover the administrative cost to process Change of Operator applications, applications for Emission Reduction Credits, and Administrative Changes to permits. This category also includes a number of specific fees such as Title V permit processing fees, CEQA and air quality modeling fees, and public noticing fees. Finally this category includes some fees that are related to specific activity such as asbestos notification and Rule 222 'registration in lieu of permit.'

*FY 2017-18 Proposed Budget:* The projection is based on the anticipated number and type of applications that will be processed. A 2.5% CPI increase is included. Also included is a 16% increase for Title V permit processing fees and a 4% increase for non-Title V permit processing fees.

### **Portable Equipment Registration Program (PERP)**

The California Air Resources Board (CARB) provides revenues to local air districts to offset the costs of inspecting equipment registered under CARB's Portable Equipment Registration Program (PERP). Fees for inspection of PERP-registered engines by SCAQMD field staff are collected by CARB at the time of registration and passed through to SCAQMD on an annual basis. Fees for inspection of all other PERP-registered equipment are billed at an hourly rate set forth in SCAQMD Rule 301, as determined by CARB and collected by SCAQMD at the time the inspection is conducted.

*FY 2017-18 Proposed Budget:* The revenue projection is based on the anticipated number of inspections.

### **Area Sources**

Emissions fees from architectural coatings revenue covers architectural coatings fair share of emissions supported programs. Quantity-based fees on architectural coatings are also assessed. SCAQMD Rule 314 covers emission-based fees and quantity-based fees. Fees on area sources are authorized by Health & Safety Code §40522.5. Beginning in FY 2008-09, annual assessments of architectural coatings, based on quantity (gallons) distributed or sold for use in SCAQMD's jurisdiction, are included in revenue projections. This revenue allows SCAQMD to recover the costs of staff working on compliance, laboratory support, architectural coatings emissions data, rule development, and architectural coatings revenue collection.



## EXPLANATION OF REVENUE SOURCES

*FY 2017-18 Proposed Budget:* Fees are based on the annual quantity and emissions of architectural coatings distributed or sold into or within the District for use in the District for the previous calendar year. Emissions are decreasing while sales volume is increasing. A 2.5% CPI increase is included.

### **California Air Resources Board Subvention**

Under Health and Safety Code Section 39800-39811, the State appropriates monies each year to CARB to subvene to the air quality districts engaged in the reduction of air contaminants pursuant to the basin wide air pollution control plan and related implementation programs. The SCAQMD received subvention funds, at its inception, beginning in 1977.

*FY 2017-18 Proposed Budget:* In FY 2002-03, the state reduced SCAQMD's subvention to \$4 million, a reduction of approximately \$2 million from the FY 2001-02 level. The current amount of \$3.9 million is included in the FY 2017-18 proposed budget.

### **Federal Grants/Other Federal Revenue**

SCAQMD receives funding from EPA Section 103 and 105 grants to help support the SCAQMD in its administration of active air quality control and monitoring programs where the SCAQMD is required to perform specific agreed-upon activities. Other EPA and Department of Energy (DOE) grants provide funding for various air pollution reduction projects. A Department of Homeland Security (DHS) grant funds a special particulate monitoring program. When stipulated in the grant agreement, the General Fund is reimbursed for administrative costs associated with grant-funded projects. Most federal grants are limited to specific purposes but EPA Section 105 grants are available for the general support of air quality-related programs. However, it is recognized that actual revenues may be impacted by potential changes in federal funding priorities in the form of lower grant revenue received through U.S. EPA grants.

*FY 2017-18 Proposed Budget:* The revenue projection is based on funding levels from current federal grants. It should be noted that potential changes in federal funding priorities are not yet reflected.

### **Interest**

Revenue from this source is the result of investing the SCAQMD's General Fund cash balances.

*FY 2017-18 Proposed Budget:* The revenue projection is based on current budget levels.

### **Leases**

Revenue in this category is a result of leasing available space at SCAQMD's Headquarters facility.

*FY 2017-18 Proposed Budget:* The projection is based on the terms of any negotiated lease payments SCAQMD expects to receive.

### **Source Test/Sample Analysis Fees**

Revenue in this category includes fees for source tests, test protocol and report reviews, continuous emissions monitoring systems (CEMS) evaluations and certifications, laboratory approval program (LAP) evaluations, and laboratory sample analyses. The revenue recovers a portion of the costs of performing tests, technical evaluations, and laboratory analyses.

*FY 2017-18 Proposed Budget:* A 2.5% CPI increase is included.

## EXPLANATION OF REVENUE SOURCES

### **Hearing Board**

Hearing Board revenue is from the filing of petitions for variances and appeals, excess emissions fees, and daily appearance fees. The revenue recovers a portion of the costs associated with these activities. Petitions for Orders for Abatement, which go before the Hearing Board, are filed by the District; therefore, there are no Hearing Board fees/revenue related to these proceedings.

*FY 2017-18 Proposed Budget:* This estimate is based on the number of hearings held/cases heard. A 2.5% CPI increase is included.

### **Penalties/Settlements**

The revenue from this source is derived from cash settlements for violations of permit conditions, SCAQMD Rules, or state law. This revenue source is available for the general support of the SCAQMD's programs.

*FY 2017-18 Proposed Budget:* It is anticipated that revenue in this category will be approximately \$5.0 million.

### **Mobile Sources**

Mobile Sources revenue is composed of four components: AB2766 revenue and administrative/program cost reimbursements from three programs: Carl Moyer, Proposition 1B, and MSRC.

AB2766:

Section 9250.17 of the Vehicle Code gives the Department of Motor Vehicles (DMV) the authority and responsibility to collect and forward to the SCAQMD four dollars for every vehicle registered in SCAQMD's jurisdictional boundaries. Thirty percent of the money (\$1.20 per vehicle) collected is recognized in SCAQMD's General Fund as mobile sources revenue and is used for programs to reduce air pollution from motor vehicles and to carry out related planning, monitoring, enforcement, and technical studies authorized by, or necessary to implement, the California Clean Air Act of 1988 or the SCAQMD Air Quality Management Plan. A proportionate share of programs that are not associated with any individual type of source (e.g., air quality monitoring) is supported by these revenues. The remaining monies are used to pay for projects to reduce air pollution from mobile vehicles: 40% (\$1.60 per vehicle) to the Air Quality Improvement Special Revenue Fund to be passed through to local governments and 30% (\$1.20 per vehicle) to the Mobile Source Air Pollution Reduction Fund (MSRC) to pay for projects recommended by the MSRC and approved by the SCAQMD Governing Board (see MSRC below).

Carl Moyer:

The Carl Moyer Memorial Air Quality Standards Attainment Program (Carl Moyer Program) provides funding from the state of California for the incremental cost of cleaner heavy-duty vehicles, off-road vehicles and equipment, marine, and locomotive engines. The General Fund receives reimbursements from the Carl Moyer Fund for staff time and other program implementation/administration costs up to specified limits.

Proposition 1B:

The Proposition 1B Program is a \$1 billion bond program approved by California voters in November 2006. This incentive program is designed to reduce diesel emissions and public health risks from goods movement activities along California's trade corridors. The General Fund receives reimbursements from the Proposition 1B Funds for staff time and other program implementation/administration costs up to specified limits.

## EXPLANATION OF REVENUE SOURCES

### MSRC:

MSRC revenue reflects the reimbursement from the Mobile Source Air Pollution Reduction Special Revenue Fund for the cost of staff support provided to the MSRC in administering a mobile source program. These administrative costs are limited by State law and the MSRC adopts a budget for staff support each year.

*FY 2017-18 Proposed Budget:* Revenue projections are based on vehicle registration data from the DMV, recent revenue received, and anticipated reimbursable staff costs to implement the Carl Moyer Prop 1B, and MSRC programs.

### Clean Fuels

The General Fund receives reimbursements from the Clean Fuels Program Special Revenue Fund for staff time and other program implementation/administration costs necessary to implement the Clean Fuels Program.

Section 9250.11 of the Vehicle Code gives the DMV authority to collect and forward to SCAQMD money for clean fuels technology advancement programs and transportation control measures related to motor vehicles, according to the plan approved pursuant to Health & Safety Code §40448.5. One dollar is collected by the DMV for every vehicle registered in SCAQMD's jurisdictional boundaries, forwarded to SCAQMD, and deposited in the Clean Fuels Program Special Revenue Fund.

Clean fuels fees from stationary sources are recorded in a separate revenue account within the Clean Fuels Program Special Revenue Fund. Fees authorized by Health & Safety Code §40512 are collected from sources that emit 250 tons or more per year of Nitrogen Oxides (NO<sub>x</sub>), Sulfur Oxides (SO<sub>x</sub>), Reactive Organic Compounds (ROC), or Particulate Matter (PM). The fees collected are used to develop and implement activities that promote the use of clean-burning fuels. These activities include assessing the cost effectiveness of emission reductions associated with clean fuels development and use of new clean fuels technologies, and other clean fuels related projects. The General Fund receives reimbursements from the Clean Fuels Program Fund for staff time and other program implementation/administration costs necessary to implement a Clean Fuels Program.

*FY 2017-18 Proposed Budget:* Revenue projections are based on anticipated reimbursable staff and other program costs to implement the Clean Fuels Program.

### Transportation Programs

In accordance with federal and state Clean Air Act requirements, SCAQMD's Rule 2202 – On-Road Vehicle Mitigation Options provides employers with various options to either reduce mobile source emissions generated from employee commutes or implement mobile source emission reduction programs. Employers with 250 or more employees at a worksite are subject to Rule 2202 and are required to submit an annual registration to implement an emission reduction program that will obtain emission reductions equivalent to a worksite specific emission reduction target. The revenue from this category is used to recover a portion of the costs associated with filing, processing, reviewing, and auditing the registrations and the ridesharing programs. Fees for indirect sources, which are sources that attract mobile sources, such as the large employers covered by Rule 2202, are authorized by Health & Safety Code §40522.5.

*FY 2017-18 Proposed Budget:* The projection is based on the anticipated number of registrations. A 2.5% CPI increase is included.

## EXPLANATION OF REVENUE SOURCES

### **Toxic "Hot Spots"**

Health and Safety Code Section 44380 requires the SCAQMD to assess and collect fees from facilities that emit toxic compounds. Fees collected are used to recover state and SCAQMD costs to collect and analyze data regarding air toxics and their effect on the public. Costs recovered include a portion of the administrative, outreach, plan processing, and enforcement costs to implement this program.

*FY 2017-18 Proposed Budget:* The revenue projection is based on estimated General Fund reimbursements from the Air Toxics Fund for staff time and other program and administrative expenditures.

### **Other**

Miscellaneous revenue includes revenue attributable to professional services the SCAQMD renders to other agencies, reimbursements from special revenue funds (non-mobile source), vanpool revenue, fees from fitness center memberships, and Public Records Act requests.

*FY 2017-18 Proposed Budget:* The revenue projections are based on historical trend information.

SCAQMD Line Item Expenditures						
Major Object / Account # / Account Description		FY 2015-16 Actuals	FY 2016-17 Adopted Budget	FY 2016-17 Amended Budget	FY 2016-17 Estimate *	FY 2017-18 Proposed Budget
<b>Salary &amp; Employee Benefits</b>						
51000-52000	Salaries	\$ 69,718,259	\$ 75,122,297	\$ 75,207,973	\$ 74,178,802	\$ 78,307,837
53000-55000	Employee Benefits	35,190,430	39,719,701	39,719,701	37,487,003	41,552,657
Sub-total Salary & Employee Benefits		\$ 104,908,689	\$ 114,841,998	\$ 114,927,674	\$ 111,665,805	\$ 119,860,494
<b>Services &amp; Supplies</b>						
67250	Insurance	\$ 1,155,189	\$ 1,317,400	\$ 1,362,400	\$ 1,296,540	\$ 1,317,400
67300	Rents & Leases Equipment	227,502	176,182	229,401	218,312	201,363
67350	Rents & Leases Structure	281,866	286,791	347,061	330,284	296,791
67400	Household	528,845	722,021	683,021	600,000	761,366
67450	Professional & Special Services	10,504,094	6,888,870	10,288,810	9,791,440	8,313,336
67460	Temporary Agency Services	1,184,229	911,420	1,309,717	1,246,404	910,060
67500	Public Notice & Advertising	266,214	403,850	395,700	376,572	469,100
67550	Demurrage	78,749	62,930	85,212	81,093	61,930
67600	Maintenance of Equipment	911,862	538,382	846,629	824,913	684,714
67650	Building Maintenance	1,016,022	882,479	880,479	818,705	1,002,479
67700	Auto Mileage	130,083	66,647	188,629	179,511	82,147
67750	Auto Service	309,576	471,000	471,000	448,231	471,000
67800	Travel	263,732	315,313	375,308	357,165	311,373
67850	Utilities	1,791,287	2,213,288	2,140,448	2,036,977	2,213,288
67900	Communications	679,741	701,000	759,260	722,557	702,000
67950	Interest Expense	3,954,555	3,863,482	3,863,482	3,863,482	3,756,716
68000	Clothing	41,040	35,698	56,878	49,945	39,578
68050	Laboratory Supplies	441,851	302,160	561,008	501,550	304,000
68060	Postage	292,410	450,087	432,258	112,136	445,087
68100	Office Expense	1,178,920	1,075,565	1,370,994	1,510,434	1,113,975
68200	Office Furniture	47,255	61,500	75,500	66,297	105,425
68250	Subscriptions & Books	147,280	173,545	176,771	155,225	175,517
68300	Small Tools, Instruments, Equipment	235,320	159,949	346,185	255,954	222,039
68400	Gas and Oil	212,728	372,000	372,000	326,658	372,000
69500	Training/Conference/Tuition/ Board Exp.	696,661	681,665	705,033	670,951	926,337
69550	Memberships	122,874	70,440	159,210	151,514	68,128
69600	Taxes	27,234	74,000	89,660	76,538	74,000
69650	Awards	51,740	77,023	77,023	77,336	77,023
69700	Miscellaneous Expenses	125,447	150,000	246,001	238,861	156,725
69750	Prior Year Expense	(46,500)	-	-	-	-
69800	Uncollectable Accounts Receivable	435,327	-	-	-	-
89100	Principal Repayment	2,235,598	2,331,010	2,331,010	2,331,010	2,432,798
Sub-total Services & Supplies		\$ 29,528,731	\$ 25,835,697	\$ 31,226,088	\$ 29,716,593	\$ 28,067,695
77000	<b>Capital Outlays</b>	\$ 3,074,374	\$ 850,000	\$ 4,046,251	\$ 3,850,652	\$ 1,950,717
79050	<b>Building Remodeling</b>	\$ -	\$ -	\$ -	\$ -	\$ -
Total Expenditures		\$ 137,511,794	\$ 141,527,695	\$ 150,200,013	\$ 145,233,050	\$ 149,878,906
* Estimates based on July 2016 through March 2017 actual expenditures and budget amendments.						

## SALARIES & EMPLOYEE BENEFITS

Acct. #	Account Description	FY 2016-17 Adopted Budget	FY 2016-17 Amended Budget	FY 2016-17 Estimate	FY 2017-18 Proposed Budget	Increase/ (Decrease) <sup>(a)</sup>
<b>51000-52000</b>	<b>SALARIES</b>	<b>\$ 75,122,297</b>	<b>\$ 75,207,973</b>	<b>\$ 74,178,802</b>	<b>\$ 78,241,222</b>	<b>\$ 3,118,952</b>
These accounts include salaries and special pays such as: Call-Back, Hazard, Night Shift, Rideshare, Skill-Based, Stand-By and Overtime. The FY 2017-18 Proposed Budget includes the costs associated with the three year labor agreement that went into effect on January 1, 2015, the addition a net of 10.25 positions and proposes to maintain vacant positions at 8%. The FY 2017-18 Proposed Budget does not include overtime amounts for federal grant work that is not expected to be awarded until mid-year and will not be appropriated until the grants are awarded.						
<b>53000</b>	<b>EMPLOYEE BENEFITS</b>	<b>\$ 3,222,026</b>	<b>\$ 3,222,026</b>	<b>\$ 2,876,680</b>	<b>\$ 3,348,005</b>	<b>\$ 125,979</b>
This account includes the costs associated with State Disability Insurance, employer share of unemployment insurance, Social Security and Medicare. In addition, this account includes individual memberships and/or management physicals.						
<b>54000</b>	<b>RETIREMENT</b>	<b>\$ 26,060,373</b>	<b>\$ 26,060,373</b>	<b>\$ 24,358,274</b>	<b>\$ 28,157,395</b>	<b>\$ 2,097,022</b>
This account includes the employer's share of the employee retirement system contributions. The increase from the FY 2016-17 Adopted Budget is based on the contribution rates provided from the San Bernardino County Retirement Association (SBCERA).						
<b>55000</b>	<b>INSURANCE</b>	<b>\$ 10,437,302</b>	<b>\$ 10,437,302</b>	<b>\$ 10,252,048</b>	<b>\$ 10,038,777</b>	<b>(\$ 398,525)</b>
This account includes employer's share of health, life, dental, vision care and accident insurance.						

<sup>(a)</sup> FY 2017-18 Proposed Budget vs. FY 2016-17 Adopted Budget.

SCAQMD Personnel Summary – Authorized/Funded Positions						
Positions as of	Mid-Year Adjustments		Positions as of	FY 2016-17 Request		Positions as of
June 30, 2016	Add	Delete	June 30, 2017	Add	Delete	July 1, 2017
813	7	(5)	815	24.25	(14)	825.25

Fiscal Year 2016-17 Mid-Year Changes in Authorized/Funded Positions					
Office	Position	Add	Delete	Total	
Compliance & Enforcement	Deputy Executive Officer	1	-	1	
Engineering & Permitting	Program Supervisor	1	-	1	
Engineering & Permitting	Air Quality Analysis & Compliance Supervisor	-	(1)	(1)	
Administrative Office	Assistant Deputy Executive Officer	1	-	1	
Legislative & Public Affairs/Media Office	Legislative Assistant	1	-	1	
Legislative & Public Affairs/Media Office	Staff Assistant	-	(1)	(1)	
Science & Technology Advancement	Air Quality Instrument I	-	(2)	(2)	
Science & Technology Advancement	Office Assistant	-	(1)	(1)	
Science & Technology Advancement	Air Quality Chemist	1	-	1	
Science & Technology Advancement	Air Quality Instrument II	1	-	1	
Science & Technology Advancement	Air Quality Specialist	1	-	1	
<b>Total Mid-Year Changes</b>		<b>7</b>	<b>(5)</b>	<b>2</b>	

## SALARIES & EMPLOYEE BENEFITS

Fiscal Year 2017-18 Requested Personnel Actions				
Office	Position	Add	Delete	Total
Compliance & Enforcement	Senior Enforcement Manager	2	-	2
Engineering & Permitting	Supervising Air Quality Engineer	8	-	8
Engineering & Permitting	Air Quality Analysis & Compliance Supervisor	-	(8)	(8)
Engineering & Permitting	Sr. Air Quality Engineering Manager	1	-	1
Engineering & Permitting	Sr. Enforcement Manager	-	(1)	(1)
Executive Office	Chief Operating Officer	1	-	1
Executive Office	Senior Administrative Secretary	-	(1)	(1)
Executive Office	Senior Policy Advisor	-	(1)	(1)
Administrative Office	Chief Administrative Officer	1	-	1
Administrative Office	Chief Financial Officer	-	(1)	(1)
Administrative Office	Senior Administrative Secretary	1	-	1
Administrative Office <sup>(b)</sup>	Assistant Deputy Executive Officer - IM	0.25	-	0.25
Administrative Office	Deputy Executive Officer	-	(1)	(1)
Legislative & Public Affairs/Media Office	Director of Communications	1	-	1
Legislative & Public Affairs/Media Office	Graphic Arts Illustrator II	-	(1)	(1)
Legislative & Public Affairs/Media Office	Sr. Office Assistant	1	-	1
Planning, Rules Development, & Area Sources	Air Quality Engineer II	1	-	1
Planning, Rules Development, & Area Sources	Air Quality Specialist	3	-	3
Science & Technology Advancement	Air Quality Instrument II	1	-	1
Science & Technology Advancement	Lab Technician	1	-	1
Science & Technology Advancement	Air Quality Specialist	1	-	1
Science & Technology Advancement	Secretary	1	-	1
<b>Total Fiscal Year 2017-18 Requested Personnel Actions</b>		<b>24.25</b>	<b>(14)</b>	<b>10.25</b>

<sup>(b)</sup> Only budgeted for three months.

## SERVICES & SUPPLIES

Acct. #	Account Description	FY 2016-17 Adopted Budget	FY 2016-17 Amended Budget	FY 2016-17 Estimate	FY 2017-18 Proposed Budget	Increase/ (Decrease) <sup>(a)</sup>
<b>67250</b>	<b>INSURANCE</b>	<b>\$1,317,400</b>	<b>\$1,362,400</b>	<b>\$1,296,540</b>	<b>\$1,317,400</b>	<b>\$ -</b>
<p>This account is for insurance coverage for the following: commercial property (real and personal) with earthquake and flood coverage, boiler and machinery, public official liability, excess workers' compensation, and excess general liability. The SCAQMD is self-insured for workers' compensation, general liability, and automobile liability. The amount requested reflects anticipated workers' compensation claims, insurance policy premiums, property losses above SCAQMD's insurance deductibles, and liability claim payments.</p>						
<b>67300</b>	<b>RENTS &amp; LEASES EQUIPMENT</b>	<b>\$176,182</b>	<b>\$229,401</b>	<b>\$218,312</b>	<b>\$201,363</b>	<b>\$25,181</b>
<p>This account is for lease agreements and/or rental of office equipment such as communication devices for emergency response inspectors, laboratory and atmospheric measurement equipment for special projects, audio visual equipment for outside meetings, printing equipment, and photocopiers. The increase from the FY 2016-17 Adopted Budget reflects an increase in the walk-up copiers lease and in equipment rentals for public meetings.</p>						
<b>67350</b>	<b>RENTS &amp; LEASES STRUCTURE</b>	<b>\$286,791</b>	<b>\$347,061</b>	<b>\$330,284</b>	<b>\$296,791</b>	<b>\$10,000</b>
<p>This account is for expenditures associated with structures and lot leases, and off-site storage rentals:</p> <ul style="list-style-type: none"> <li>Long Beach field office - \$106,791;</li> <li>Wind Station Leases in the Coachella Valley - \$2,000;</li> <li>Conference and meeting rooms - \$9,000;</li> <li>Air monitoring sites/Wind Stations - \$169,000; and</li> <li>Public Meetings - \$10,000</li> </ul> <p>Free and low-cost public facilities are used whenever possible for public workshops and informational meetings. The change from the FY 2016-17 Adopted Budget is due to additional budget for public meeting building rentals. The FY 2017-18 Proposed Budget does not include amounts for federally funded grant programs. An expenditure appropriation will occur mid-year when the grants are awarded.</p>						
<b>67400</b>	<b>HOUSEHOLD</b>	<b>\$722,021</b>	<b>\$683,021</b>	<b>\$600,000</b>	<b>\$761,366</b>	<b>\$ 39,345</b>
<p>This account is used for trash disposal, landscape maintenance, parking lot maintenance, janitorial supplies, and janitorial contracts. This account is also used for expenses associated with the Diamond Bar facility, such as specialized cleaning supplies and services required in the computer room. The change from the FY 2016-17 Adopted Budget is due to an increase in the janitorial contract.</p>						
<b>67450</b>	<b>PROFESSIONAL &amp; SPECIAL SERVICES</b>	<b>\$6,888,870</b>	<b>\$10,288,810</b>	<b>\$9,791,440</b>	<b>\$8,313,336</b>	<b>\$1,424,466</b>
<p>This account is for services rendered to the SCAQMD by outside contractors. The FY 2017-18 Professional &amp; Special Services supporting detail is located at the end of this section. The increase from the FY 2016-17 Adopted Budget is attributed to including budget for Clean Fuels, Prop 1B and Carl Moyer expenditures during the budget process instead of through a budget amendment as in past fiscal years. The FY 2017-18 Proposed Budget does not include amounts for federally funded grant programs. An expenditure appropriation will occur mid-year when the grants are awarded.</p>						

<sup>(a)</sup>FY 2017-18 Proposed Budget vs. FY 2016-17 Adopted Budget.



## SERVICES & SUPPLIES

Acct. #	Account Description	FY 2016-17 Adopted Budget	FY 2016-17 Amended Budget	FY 2016-17 Estimate	FY 2017-18 Proposed Budget	Increase/ (Decrease) <sup>(a)</sup>
<b>67460</b>	<b>TEMPORARY AGENCY SERVICES</b>	<b>\$911,420</b>	<b>\$1,309,717</b>	<b>\$1,246,404</b>	<b>\$910,060</b>	<b>(\$1,360)</b>
Funds budgeted in this account are used for specialized temporary services that supplement staff in support of SCAQMD programs. Amounts are budgeted as a contingency for long-term absences and retirements/resignations. Also budgeted in this account is the student internship program that provides college students with the opportunity to gain experience in the workplace. The FY 2017-18 Proposed Budget does not include amounts for federally funded grant programs. An expenditure appropriation will occur mid-year when the grants are awarded.						
<b>67500</b>	<b>PUBLIC NOTICE &amp; ADVERTISING</b>	<b>\$403,850</b>	<b>\$395,700</b>	<b>\$376,572</b>	<b>\$469,100</b>	<b>\$65,250</b>
This account is used for legally required publications such as Requests for Proposals, Requests for Quotations, personnel recruitment, public outreach, advertisement of SCAQMD Governing Board and Hearing Board meetings, and public notification of SCAQMD rulemaking activities. The increase from the FY 2016-17 Adopted Budget is due to an anticipated increase in legally required publications.						
<b>67550</b>	<b>DEMURRAGE</b>	<b>\$62,930</b>	<b>\$85,212</b>	<b>\$ 81,093</b>	<b>\$61,930</b>	<b>(\$1,000)</b>
This account is for various freight and cylinder charges as well as workspace reconfigurations and personnel moves. The FY 2017-18 Proposed Budget does not include amounts for federally funded grant programs. An expenditure appropriation will occur mid-year when the grants are awarded.						
<b>67600</b>	<b>MAINTENANCE OF EQUIPMENT</b>	<b>\$538,382</b>	<b>\$846,629</b>	<b>\$824,913</b>	<b>\$684,714</b>	<b>\$146,332</b>
This account is for maintenance costs of SCAQMD equipment such as the following: mainframe computer hardware, phone switch, air monitoring equipment, print shop equipment, copiers, and audio visual equipment. The FY 2017-18 Proposed Budget reflects the increased cost of maintenance for the IP network as well for printers, server hardware and network hardware but does not include amounts for federally funded grant programs. An expenditure appropriation will occur mid-year when the grants are awarded.						
<b>67650</b>	<b>BUILDING MAINTENANCE</b>	<b>\$882,479</b>	<b>\$880,479</b>	<b>\$818,705</b>	<b>\$1,002,479</b>	<b>\$120,000</b>
This account reflects expenditures for maintaining SCAQMD offices and air monitoring stations. Also included are: a contingency amount for unplanned repairs; Gateway Association dues; elevator maintenance; energy management; and compressor services. The increase from the FY 2016-17 Adopted Budget is to re-establish the Burbank and Long Beach air monitoring stations. The FY 2017-18 Proposed Budget does not include amounts for federally funded grant programs. An expenditure appropriation will occur mid-year when the grants are awarded.						

<sup>(a)</sup>FY 2017-18 Proposed Budget vs. FY 2016-17 Adopted Budget.

## SERVICES & SUPPLIES

Acct. #	Account Description	FY 2016-17 Adopted Budget	FY 2016-17 Amended Budget	FY 2016-17 Estimate	FY 2017-18 Proposed Budget	Increase/ (Decrease) <sup>(a)</sup>
<b>67700</b>	<b>AUTO MILEAGE</b>	<b>\$66,647</b>	<b>\$188,629</b>	<b>\$179,511</b>	<b>\$82,147</b>	<b>\$15,500</b>
This account is used to reimburse employees for the cost of using personal vehicles while on SCAQMD business. The requests include the mileage incurred for staff that are required to work on their scheduled days off and for employees who use their personal vehicles on SCAQMD-related business, conferences, and seminars and to attend various community, business and intergovernmental events. The increase from the FY 2016-17 Adopted Budget reflects an increase in the mileage for Engineering & Permitting staff required to work on their scheduled days off. The FY 2017-18 Proposed Budget does not include amounts for federally funded grant programs. An expenditure appropriation will occur mid-year when the grants are awarded.						
<b>67750</b>	<b>AUTO SERVICE</b>	<b>\$471,000</b>	<b>\$471,000</b>	<b>\$448,231</b>	<b>\$471,000</b>	<b>\$ -</b>
This account is used for the maintenance, towing, repair, and expired CNG tank replacement of SCAQMD fleet vehicles. The FY 2017-18 Proposed Budget reflects the growing age of the fleet and the costs to maintain vehicles.						
<b>67800</b>	<b>TRAVEL</b>	<b>\$315,313</b>	<b>\$375,308</b>	<b>\$357,165</b>	<b>\$311,373</b>	<b>(\$ 3,940)</b>
This account is for business travel, including lodging and meals paid pursuant to the Administrative Code, for participation in legislative hearings and meetings involving state, federal, and inter-agency issues that affect air quality in the South Coast Air Basin. The FY 2017-18 Proposed Budget reflects anticipated needs but does not include amounts for federally funded grant programs. An expenditure appropriation will occur mid-year when the grants are awarded.						
<b>67850</b>	<b>UTILITIES</b>	<b>\$2,213,288</b>	<b>\$2,140,448</b>	<b>\$2,036,977</b>	<b>\$2,213,288</b>	<b>\$-</b>
This account is used to pay gas, water, and electricity costs at the SCAQMD's headquarters building, the Long Beach field office, and air monitoring stations.						
<b>67900</b>	<b>COMMUNICATIONS</b>	<b>\$701,000</b>	<b>\$759,260</b>	<b>\$722,557</b>	<b>\$702,000</b>	<b>\$1,000</b>
This account includes telephone and fax service, leased computer lines, video conferencing, wireless internet access for inspectors in the field, radio, and microwave services. The FY 2017-18 Proposed Budget does not include amounts for federally funded grant programs. An expenditure appropriation will occur mid-year when the grants are awarded.						
<b>67950</b>	<b>INTEREST EXPENSE</b>	<b>\$3,863,482</b>	<b>\$3,863,482</b>	<b>\$3,863,482</b>	<b>\$3,756,716</b>	<b>(\$106,766)</b>
This account is for the interest due on the 1995 and 2004 Pension Obligation Bonds. The decrease from the FY 2016-17 Adopted Budget reflects scheduled payments for FY 2017-18						

<sup>(a)</sup>FY 2017-18 Proposed Budget vs. FY 2016-17 Adopted Budget.

## SERVICES & SUPPLIES

Acct. #	Account Description	FY 2016-17 Adopted Budget	FY 2016-17 Amended Budget	FY 2016-17 Estimate	FY 2017-18 Proposed Budget	Increase/ (Decrease) <sup>(a)</sup>
<b>68000</b>	<b>CLOTHING</b>	<b>\$35,698</b>	<b>\$56,878</b>	<b>\$49,945</b>	<b>\$39,578</b>	<b>\$3,880</b>
This account is for the purchase of safety equipment and protective clothing used by source testing, laboratory, compliance, and stockroom personnel. The increase from the FY 2016-17 Adopted Budget reflects the anticipated level of expenditures for FY 2017-18.						
<b>68050</b>	<b>LABORATORY SUPPLIES</b>	<b>\$302,160</b>	<b>\$561,008</b>	<b>\$501,550</b>	<b>\$304,000</b>	<b>\$1,840</b>
This account is used to purchase various supplies such as chemicals, calibration gases and glassware for laboratory services. The FY 2017-18 Proposed Budget reflects anticipated needs but does not include amounts for federally funded grant programs. An expenditure appropriation will occur mid-year when the grants are awarded.						
<b>68060</b>	<b>POSTAGE</b>	<b>\$450,087</b>	<b>\$432,258</b>	<b>\$112,136</b>	<b>\$445,087</b>	<b>(\$ 5,000)</b>
This account covers the cost of mailing out annual billings, permits, notifications to the Governing Board and Advisory groups, monthly newsletters, warrants, outreach materials to local governments, and Rule 2202 notifications. The FY 2017-18 Proposed Budget reflects mailings based on current activity.						
<b>68100</b>	<b>OFFICE EXPENSE</b>	<b>\$1,075,565</b>	<b>\$1,370,994</b>	<b>\$1,510,434</b>	<b>\$1,113,975</b>	<b>\$38,410</b>
This account is used for the purchase of office supplies, computer hardware and software under \$5,000, photocopier supplies, print shop and artist supplies, and stationery and forms. The FY 2017-18 Proposed Budget reflects anticipated needs but does not include amounts for federally funded grant programs. An expenditure appropriation will occur mid-year when the grants are awarded.						
<b>68200</b>	<b>OFFICE FURNITURE</b>	<b>\$61,500</b>	<b>\$75,500</b>	<b>\$66,297</b>	<b>\$105,425</b>	<b>\$ 43,925</b>
This account is for office furniture under \$5,000. The increase in the FY 2017-18 Proposed Budget reflects staffing level needs as well as an anticipated increase in the need for ergonomic furniture.						
<b>68250</b>	<b>SUBSCRIPTIONS &amp; BOOKS</b>	<b>\$173,545</b>	<b>\$176,771</b>	<b>\$155,225</b>	<b>\$175,517</b>	<b>\$1,972</b>
This account is used to purchase reference materials, magazine subscriptions, books, and on-line database legal research services. The FY 2017-18 Proposed Budget reflects anticipated cost increases.						
<b>68300</b>	<b>SMALL TOOLS, INSTRUMENTS, EQUIPMENT</b>	<b>\$159,949</b>	<b>\$346,185</b>	<b>\$255,954</b>	<b>\$222,039</b>	<b>\$62,090</b>
This account covers the purchase of small tools and equipment for air monitoring stations, laboratory, and headquarters building maintenance. The increase from the FY 2016-17 Adopted Budget is due to stricter quality control, an expanded monitoring network, and increased use of equipment; however, it does not include amounts for federally funded grant programs. An expenditure appropriation will occur mid-year when the grants are awarded.						

<sup>(a)</sup>FY 2017-18 Proposed Budget vs. FY 2016-17 Adopted Budget.

## SERVICES & SUPPLIES

Acct. #	Account Description	FY 2016-17 Adopted Budget	FY 2016-17 Amended Budget	FY 2016-17 Estimate	FY 2017-18 Proposed Budget	Increase/ (Decrease) <sup>(a)</sup>
<b>68400</b>	<b>GAS &amp; OIL</b>	<b>\$372,000</b>	<b>\$372,000</b>	<b>\$326,658</b>	<b>\$372,000</b>	<b>\$ -</b>
This account is for the purchase of gasoline, oil, and alternative fuels for the SCAQMD fleet. The cost is anticipated to stay flat from the FY 2016-17 Adopted Budget.						
<b>69500</b>	<b>TRAINING/CONF/ TUITION/BOARD EXP</b>	<b>\$681,665</b>	<b>\$705,033</b>	<b>\$670,951</b>	<b>\$926,337</b>	<b>\$244,672</b>
This account is used for tuition reimbursement, conference and training registrations, certain costs associated with the SCAQMD's Governing and Hearing Boards and advisory groups, and training-related travel expenditures. The FY 2017-18 Proposed Budget reflects anticipated needs and includes increases in field and lab certification training and Hearing Boars costs.						
<b>69550</b>	<b>MEMBERSHIPS</b>	<b>\$70,440</b>	<b>\$159,210</b>	<b>\$151,514</b>	<b>\$68,128</b>	<b>(\$2,312)</b>
This account provides for SCAQMD membership in in scientific, clean fuels, advanced technology, and related environmental business/policy organizations. The FY 2017-18 Proposed Budget reflects anticipated needs.						
<b>69600</b>	<b>TAXES</b>	<b>\$74,000</b>	<b>\$89,660</b>	<b>\$76,538</b>	<b>\$74,000</b>	<b>\$ -</b>
This account is for unsecured property and use taxes, fuel taxes, and sales taxes. The cost is anticipated to stay flat from the FY 2016-17 Adopted Budget.						
<b>69650</b>	<b>AWARDS</b>	<b>\$77,023</b>	<b>\$77,023</b>	<b>\$77,336</b>	<b>\$77,023</b>	<b>\$ -</b>
This account covers employee service awards for continuous service, employee recognition programs, plaques/awards the SCAQMD may present to individuals/businesses/community groups for outstanding contributions towards air quality goals, and promotional awards for community events. The cost is anticipated to stay flat from the FY 2016-17 Adopted Budget.						
<b>69700</b>	<b>MISCELLANEOUS EXPENSES</b>	<b>\$150,000</b>	<b>\$246,014</b>	<b>\$238,861</b>	<b>\$156,725</b>	<b>\$6,725</b>
This account is to record expenditures that do not fall in any other account such as SCAQMD advisory group per diems, meeting and event expenses, and sponsorships. The increase from the FY 2016-17 Adopted Budget reflects the anticipated level of expenditures for FY 2017-18.						
<b>69750</b>	<b>PRIOR YEAR EXPENSE</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
This account is used to record actual expenditures attributable to prior year budgets. No amount is budgeted for this account due to the nature of the account.						

<sup>(a)</sup>FY 2017-18 Proposed Budget vs. FY 2016-17 Adopted Budget.

# SERVICES & SUPPLIES

	Account Description	FY 2016-17 Adopted Budget	FY 2016-17 Amended Budget	FY 2016-17 Estimate	FY 2017-18 Proposed Budget	Increase/ (Decrease) <sup>(a)</sup>
<b>69800</b>	<b>UNCOLLECTIBLE ACCOUNTS RECEIVABLE</b>	\$ -	\$ -	\$ -	\$ -	\$ -
No amount is budgeted for this account due to the nature of the account.						
<b>89100</b>	<b>PRINCIPAL REPAYMENT</b>	<b>\$2,331,010</b>	<b>\$2,331,010</b>	<b>\$2,331,010</b>	<b>\$2,432,798</b>	<b>(\$101,788)</b>
This account reflects the principal due on pension obligation bonds. The increase from the FY 2016-17 Adopted Budget reflects scheduled payments for FY 2017-18						

<sup>(a)</sup> FY 2017-18 Proposed Budget vs. FY 2016-17 Adopted Budget.

**SERVICES & SUPPLIES**

<b>Proposed Fiscal Year 2017-18 Professional &amp; Special Services Detail by Office</b>			
<b>Office</b>	<b>Program</b>	<b>Contract Description</b>	<b>Amount</b>
<b>District General</b>	Dist. General Overhead	Administrative Fees for 1995 & 2004 Pension Obligation Bonds (POBs)	\$1,500
	Dist. General Overhead	Arbitration/Hearing Officer	9,400
	Dist. General Overhead	Benefits Administrator	13,000
	Dist. General Overhead	COBRA Administration Services	6,000
	Dist. General Overhead	Custodial Fees for 1995 & 2004 POBs	800
	Dist. General Overhead	Employee Assistance Program	13,995
	Dist. General Overhead	Employee Relations Litigation	250,000
	Dist. General Overhead	Health Reimbursement Arrangement Plan Administration	5,000
	Dist. General Overhead	Modular Furniture Maintenance, Setup, and Moving Services	15,000
	Dist. General Overhead	Oracle Software Support	30,400
	Dist. General Overhead	PeopleSoft Maintenance	208,400
	Dist. General Overhead	Plans and Design Consulting Services	95,000
	Dist. General Overhead	Security Alarm Monitoring	1,980
	Dist. General Overhead	Security Guard Services	498,000
	Dist. General Overhead	Wellness Program	37,500
	<b>Sub-total District General</b>		<b>\$1,185,975</b>
<b>Governing Board</b>	Operational Support	Board Member Assistant/Consultants	\$713,628
	<b>Sub-total Governing Board</b>		<b>\$713,628</b>
<b>Executive Office</b>	Develop Programs	Professional & Special Services	\$150,000
	<b>Sub-total Executive Office</b>		<b>\$150,000</b>
<b>Finance</b>	Operational Support	Bank Service Charges/Los Angeles County Treasurer Office	\$60,000
	Ensure Compliance	Bank Services Fund 15, Hot Spots Lockbox	15,000
	Operational Support	Financial Audit	45,000
	Operational Support	Financial Consultant for Treasury Management	23,000
	Operational Support	LA County Treasurer Office - PGP Maintenance	1,650
	<b>Sub-total Finance</b>		<b>\$144,650</b>
<b>Legal</b>	Ensure Compliance	Experts/Court Reporters/Attorney Services	\$30,000
	Ensure Compliance	Litigation Counsel	169,500
	Ensure Compliance	Software Maintenance & Licensing - Courtview Justice Solutions	30,000
	Operational Support	Specialized Legal Services	50,000
	<b>Sub-total Legal</b>		<b>\$279,500</b>

**SERVICES & SUPPLIES**

<b>Proposed Fiscal Year 2017-18 Professional &amp; Special Services Detail by Office (cont.)</b>			
<b>Office</b>	<b>Program</b>	<b>Contract Description</b>	<b>Amount</b>
<b>Administrative &amp; Human Resources</b>	Operational Support	Architectural, Engineering and Surveyor Consultants	\$3,250
	Operational Support	In-house Training Classes	500
	Operational Support	Insurance Broker of Record	49,000
	Operational Support	Locksmith	2,000
	Operational Support	Medical Services Provider	20,000
	Operational Support	NEOGOV Subscription License	8,000
	Operational Support	Occupational Health Services	25,000
	Customer Service & Business Assistance	Outside Binding Services	6,000
	Customer Service & Business Assistance	Outside Printing Services	5,000
	Operational Support	Test Development	15,000
	Operational Support	Third-Party Claims Administrator for Workers Compensation	18,000
	<b>Sub-total Administrative &amp; Human Resources</b>		<b>\$151,750</b>
<b>Clerk of the Boards</b>	Ensure Compliance	Court Reporting, Audio-visual, and/or Security Services	\$64,100
	Ensure Compliance	Outside Legal Contract	15,000
	Ensure Compliance	Professional Interpreter Services	6,400
	<b>Sub-total Clerk of the Boards</b>		<b>\$85,500</b>
<b>Information Management</b>	Operational Support	Action Works Metro System Software Support	\$20,000
	Operational Support	Adobe Creative Cloud Software Support	600
	Operational Support	AER & R1113/314 Upgrade & Maintenance	15,000
	Operational Support	AIS (Address Information System) Five Digit subscription	1,100
	Operational Support	Anti-Spam Maintenance/Support	11,500
	Operational Support	ArcGIS Online Annual Subscription	1,000
	Operational Support	Backup Software	33,600
	Operational Support	Backup Utility Maintenance	11,500
	Operational Support	CLASS System Maintenance	88,000
	Operational Support	Component One Software Support	1,100
	Operational Support	Computer-Based Training Software Support	1,800
	Operational Support	CourtView System Maintenance	10,000

**SERVICES & SUPPLIES**

<b>Proposed Fiscal Year 2017-18 Professional &amp; Special Services Detail by Office (cont.)</b>			
<b>Office</b>	<b>Program</b>	<b>Contract Description</b>	<b>Amount</b>
<b>Information Management (cont.)</b>	Operational Support	Crystal Reports Software Support	\$20,000
	Operational Support	Disaster Recovery Software	60,000
	Operational Support	Dundas Chart Software Support	700
	Operational Support	Dynamic Web Twain License Renewal	4,500
	Operational Support	Email Recovery Software (PowerControls) Maint/Support	1,750
	Operational Support	Email Reporting	3,800
	Operational Support	ERwin ERX & BPwin SW Support	24,000
	Operational Support	Faxcom FaxServer Support	12,500
	Operational Support	Imaging Software Support	131,000
	Operational Support	Infragistics Pro Software Support	1,000
	Operational Support	Ingres/OpenIngres Additional Licensing	72,000
	Operational Support	Ingres/OpenIngres Advanced Success Pack	140,000
	Operational Support	Installshield Software Support	3,800
	Operational Support	Internet Filtering Maintenance/Support	35,000
	Operational Support	Kronos Time Keeper	2,000
	Operational Support	Microsoft Developer Network CD - Application Development	15,196
	Operational Support	Microsoft Developer Network Premium Renewal	4,000
	Operational Support	Microsoft Technical Software Support (Server Applications)	15,000
	Operational Support	Microsoft Virtual Earth Maintenance/Support	12,500
	Operational Support	Network Analyzer (Sniffer) Maintenance/Support	4,500
	Operational Support	Network Backbone Support	15,000
	Operational Support	NT Software Support - Proactive	62,000
	Operational Support	Off-site Document Destruction Services	24,000
	Operational Support	Off-site Storage Nightly Computer Backup	22,000
	Operational Support	Online Filing Infrastructure	25,000
	Operational Support	PowerBuilder Software Support	24,000
	Operational Support	PreEmptive Analytics Software Support	7,000
	Operational Support	Proxy Reporting Support	3,250
	Operational Support	PVCS Software Support	4,900
	Operational Support	ScaleOut StateServer Maintenance	8,266



**SERVICES & SUPPLIES**

<b>Proposed Fiscal Year 2017-18 Professional &amp; Special Services Detail by Office (cont.)</b>			
<b>Office</b>	<b>Program</b>	<b>Contract Description</b>	<b>Amount</b>
<b>Information Management (cont.)</b>	Operational Support	SCAQMD Web Application Modifications	\$20,000
	Operational Support	Secure Service Digital ID Services	1,000
	Operational Support	Secure Service Digital ID DEC Internet Server	850
	Operational Support	Sitefinity CMS Software Support	9,500
	Operational Support	Software Support for EOS.Web Enterprise	6,300
	Operational Support	Software Support for On-Line Catalog	2,050
	Operational Support	Swiftview Software Support	950
	Operational Support	Telephone Switchview Software Support	9,500
	Operational Support	Terminal Emulation (Reflection) Maintenance/Support	1,175
	Operational Support	Videoteleconferencing Maintenance & Support	13,000
	Operational Support	Virus Scan Support	15,000
	Operational Support	Visual Expert Software Support	6,000
	Operational Support	Web Consulting Support	64,300
	Operational Support	Web Core Technology Upgrade (.NET upgrade)	10,000
	Operational Support	Website Evaluation & Improvement	200,000
	<b>Sub-total Information Management</b>		<b>\$1,313,487</b>
<b>Planning, Rule Development, &amp; Area Sources</b>	Ensure Compliance	AER Printing	\$5,000
	Monitoring Air Quality	Air Quality Forecast and Alert Notification Support	50,000
	Develop Programs	California Emissions Estimator Model (CalEEMod) Upgrades/Support	10,000
	Develop Programs	CEQA for AQMD Projects	140,000
	Develop Programs	CEQA Special Studies	50,000
	Timely Review of Permits	Dispersion Modeling Support	50,000
	Develop Programs	Implementation of Abts Recommendations	330,000
	Monitoring Air Quality	Maintain Wind Stations and Analyze Data	60,000
	Monitoring Air Quality	MATES V	50,000
	Monitoring Air Quality	Meteorological Data Services	7,500
	Develop Rules	PM and Ozone Model Consulting	90,000
	Develop Programs	Rule 2202 Computer System Maintenance	15,000
	Customer Service & Business Assistance	Rule 2202 ETC On-Line Training	25,000

SERVICES & SUPPLIES

Proposed Fiscal Year 2017-18 Professional & Special Services Detail by Office (cont.)			
Office	Program	Contract Description	Amount
<b>Planning, Rule Development, &amp; Area Sources (cont.)</b>	Develop Programs	SIP, AQMP and Rule Printing	\$8,000
	Develop Rules	Software renewal, upgrades and purchase in support of economic modeling	150,000
	Develop Rules	Technical Assessment in of Regional Modeling	50,000
	Ensure Compliance	Technology Assessment Studies	75,000
	Monitoring Air Quality	Weather Data Services Communications	7,500
	<b>Sub-total Planning, Rule Development &amp; Area Sources</b>		<b>\$1,173,000</b>
<b>Legislative &amp; Public Affairs/Media Office</b>	Policy Support	After-hours Call Center Service	\$3,500
	Customer Service & Business Assistance	Clean Air Awards	12,600
	Customer Service & Business Assistance	Community Outreach	410,000
	Policy Support	Graphics & Printing	33,616
	Policy Support	Graphics, Printing & Outreach Materials	4,000
	Policy Support	Legislative Advocacy - Sacramento	365,000
	Policy Support	Legislative Advocacy - Washington DC	665,130
	Policy Support	Legislative Computer Services	10,000
	Customer Service & Business Assistance	Multi-Lingual Translation - Public Participation	20,000
	Policy Support	News Release Services	9,000
	Policy Support	Photographic and Video Services - MO	5,000
	Policy Support	Photographic and Video Services	50,000
	Customer Service & Business Assistance	Promotion Marketing of Smart Phone Tools	50,000
	Policy Support	Radio/Television Monitoring	11,000
	<b>Sub-total Legislative &amp; Public Affairs/Media Office</b>		<b>\$1,648,846</b>
<b>Science &amp; Technology Advancement</b>	Ensure Compliance	Laboratory Analytical Services	\$15,000
	Advanced Clean Air Technology	Technical Assistance, Expert Consultation, Outreach/Education – Clean Fuels	1,000,000
	Advanced Clean Air Technology	Technical Assistance, Expert Consultation, Outreach/Education – CMP, AB923	75,000
	Develop Programs	Technical Assistance, Expert Consultation, Outreach/Education – Prop 1B	300,000
	Ensure Compliance	Source Testing Services	30,000
	Ensure Compliance	Technical Support for Air Monitoring and Community Complaint Resolution	35,000
	<b>Sub-total Science &amp; Technology Advancement</b>		<b>\$1,455,000</b>

## SERVICES & SUPPLIES

Proposed Fiscal Year 2017-18 Professional & Special Services Detail by Office (cont.)			
Office	Program	Contract Description	Amount
Engineering & Permitting	Operational Support	Workspace Reconfiguration	\$2,500
	Sub-total Engineering & Permitting		\$2,500
Compliance & Enforcement	Ensure Compliance	Lab Analysis Services for R1176 and other air samples	\$5,000
	Operational Support	Workspace Reconfiguration	4,500
	Sub-total Compliance & Enforcement		\$9,500
Total Professional & Special Services			\$8,313,336

## CAPITAL OUTLAYS & BUILDING REMODELING

Acct. #	Account Description	FY 2016-17 Adopted Budget	FY 2016-17 Amended Budget	FY 2016-17 Estimate	FY 2017-18 Proposed Budget	Increase/ (Decrease) <sup>(a)</sup>
<b>77000</b>	<b>CAPITAL OUTLAYS</b>	<b>\$ 850,000</b>	<b>4,046,251</b>	<b>\$ 3,850,652</b>	<b>\$ 1,950,717</b>	<b>\$1,100,717</b>

This account is for tangible asset expenditures with a value of at least \$5,000 and a useful life of at least three years and intangible asset expenditures with a value of at least \$5,000 and a useful life of at least one year. The increase from the FY 2016-17 Adopted Budget reflects anticipated needs. The FY 2017-18 Proposed Budget does not include amounts for federally funded grant programs. An expenditure appropriation will occur mid-year when the grants are awarded.

A listing by office of the proposed Capital Outlays for FY 2017-18 is provided at the end of this section.

<sup>(a)</sup>FY 2017-18 Proposed Budget vs. FY 2016-17 Adopted Budget.

Acct. #	Account Description	FY 2015-16 Adopted Budget	FY 2015-16 Amended Budget	FY 2015-16 Estimate	FY 2016-17 Proposed Budget	Increase/ (Decrease) <sup>(a)</sup>
<b>79050</b>	<b>BUILDING REMODELING</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>

This account is used for minor remodeling projects which become necessary as a result of reorganizations or for safety reasons. No projects are anticipated in Fiscal Year 2017-18.

<sup>(a)</sup>FY 2017-18 Proposed Budget vs. FY 2016-17 Adopted Budget.

## CAPITAL OUTLAYS & BUILDING REMODELING

Fiscal Year 2017-18 Capital Outlays Detail				
Office	Program	Category	Description	Amount
District General	Operational Support	N/A	<u>Unbudgeted Capital Outlay</u> - This amount is set aside for unanticipated needs or emergency situations to avoid interruption of operations.	\$75,000
	Operational Support	Replacement	<u>System Support and Programming (PeopleSoft/CLASS)</u> - Funding for functional and technical support and special reporting needs for the Clean Air Support System (CLASS)-Finance automated billing and the PeopleSoft Human Capital Management and Financial Accounting systems.	75,000
	Operational Support	Replacement	<u>Fiber Cable Network Infrastructure Upgrade</u> – Funding for a fiber network cable system that will provide sufficient bandwidth to support the increasing bandwidth demands from multiple desktop 1 Gb/s connections (data, audio, video)	250,000
	Operational Support	Replacement	<u>Utility Cart</u> - Funding to replace a non-operational 27 year old cart that is needed to move equipment, tools and supplies for various maintenance projects at the SCAQMD Headquarters.	18,717
	<b>Sub-total District General</b>			<b>\$418,717</b>
Legal	Ensure Compliance	New	<u>Expand/Enhance Reporting Capabilities within JWorks Case Management Software</u> – Software enhancements to provide customized reporting functions that are necessary to broaden capabilities and improve efficiency and effectiveness.	\$25,000
	<b>Sub-total Legal</b>			<b>\$25,000</b>
Planning, Rule Development & Area sources	Develop Rules	New	<u>Architectural Coating Reporting &amp; Fee Billing</u> - Funding for modifications and enhancements to the web-based R314/R1113 Architectural Coatings Reporting system to enhance functionality for invoicing, auditing, data management, reporting and QA/QC validations.	\$50,000
	Ensure Compliance	New	<u>Rule 1415 Online Reporting Program</u> – Funding for systems development to modify the Rule 1415 web application, the completion of the software development lifecycle (SDLC), and the deployment of the enhanced systems into the production environment.	30,000
	Ensure Compliance	New	<u>Support Web-Based Annual Emissions Reporting Software</u> - Enhancements to the software system to ensure the system retains its functionality.	100,000
	<b>Sub-total Planning, Rules &amp; Area Sources</b>			<b>\$180,000</b>
Information Management	Operational Support	New	<u>Miscellaneous Telecommunication Upgrade/Enhancement</u> – Funding to enable Telecommunications to meet unforeseen network needs/changes required to support SCAQMD staff.	\$35,000

## CAPITAL OUTLAYS & BUILDING REMODELING

Fiscal Year 2017-18 Capital Outlays Detail (cont.)				
Office	Program	Category	Description	Amount
Information Management (cont.)	Operational Support	Replacement	<u>Network Server Upgrade</u> – Funding to upgrade network servers to support new operating systems and new server applications	\$75,000
	Operational Support	New	<u>PeopleSoft Migration/Upgrade</u> – Funding to upgrade PeopleSoft Financials 9.1 to 9.2 and thus continue to receive software updates/support to be in compliance with federal and state regulations	250,000
	Operational Support	New	<u>GIS Infrastructure Update</u> - Funding to upgrade SCAQMD’s GIS infrastructure to support critical real-time applications (i.e. air quality maps, FIND facility maps, Check Before you Burn Maps, etc.)	25,000
	Timely Review of Permits	New	<u>Title V Fee Increase Implementation</u> – Funding to implement the proposed Title V fee increase in the SCAQMD billing system.	115,000
	Operational Support	New	<u>Fujitsu Color Duplex Scanner</u> - Funding to acquire a scanner capable of handling larger drawings.	6,600
	Sub-total Information Management			\$506,600
	Legislative & Public Affairs/Media Office	Operational Support	Replacement	<u>Large Format Printer</u> – Funding to replace a large format printer that is over seven years old.
	Operational Support	Replacement	<u>Laminator - Wide Format</u> – Funding to replace a wide format laminator that is over six years old.	5,400
	Operational Support	Replacement	<u>Apple Computer</u> – Funding for a computer to store and archive old events and projects.	8,000
	Sub-total Legislative & Public Affairs/Media Office			\$19,400
	Science & Technology Advancement	Ensure Compliance	Replacement	<u>GC-TCA-FID with gas sampling valve and autosampler</u> – Funding for an instrument used for oil and gas industry rules analysis; measures source-level and fugitive-level emissions.
	Monitoring Air Quality	New	<u>Software application for refinery emission project</u> – Funding to purchase software to automate the validation and analysis of collected data from sensors monitoring VOC emissions.	60,000
	Advance Clean Air Technology	New	<u>Annual July Board letter Clean Fuels: Advanced Tech Vehicles/Infrastructure</u> – Funding for advanced technology vehicles.	285,000
	Sub-total Science & Technology Advancement			\$420,000
Engineering & Permitting	Timely Review of Permits	New	<u>Title V Online Permit Publishing</u> – Funding to acquire an online system which will allow for indexing of each section of the Title V permit.	\$20,000
	Sub-total Engineering & Permitting			\$20,000
Compliance & Enforcement	Ensure Compliance	New	<u>Title V Web Application Development</u> – Funding to develop a web-based Title V application process.	\$200,000
	Ensure Compliance	Replacement	<u>Portable Toxic Vapor Analyzer (TVA), Flame Ionization Detectors (FIDs) with Photo Ionization Detector (PID)</u> - Funding for instruments used to monitor gases above the surface of landfills and VOC contaminated soils.	161,000
	Sub-total Compliance & Enforcement			\$361,000
Total Capital Outlays				\$1,950,717

## WORK PROGRAM OVERVIEW

The Work Program is a management tool that allocates resources by Office, Program Category, and project. It is developed from Program Output Justifications prepared during the budget process by each Office. Work Programs for each Office can be found in the “OFFICE BUDGETS” section of this document. Work Programs by Program Category are within the following pages. A glossary of terms and acronyms used in the Work Program are at the end of this section.

Professional & Special Services, Temporary Agency Services, and Capital Outlays expenditures are assigned to specific Work Program Codes associated with the project the expenditures support. All other expenditures (Salaries and Benefits and most Services and Supplies line items) are distributed within an Office by Full-Time Equivalent (FTE). A District General overhead cost has been apportioned to each Work Program line based on the number of FTE staff positions for that line.

The following is a brief description of each column in the Work Program:

The **#** column identifies each line in the Work Program in numerical order.

The **Program Code** is a five-digit code assigned to each program. The first two digits represent the Office number. The last three digits are the Program number.

The **Goal** column identifies which of the three Program Goals (defined in the Draft Goals and Priority Objectives) applies to that output. The Goals are:

**GOAL I**      **Achieve Clean Air Standards.**

**GOAL II**      **Enhance Public Education and Equitable Treatment for All Communities.**

**GOAL III**      **Operate Efficiently and Transparently.**

The **Office** column, which appears on the Work Program by Category document, identifies the Office responsible for performing the work.

The **Program Category** column, which appears on the Work Program by Office document, identifies one of the nine Program Categories associated with an activity.

The **Program** column identifies the Program associated with the work.

The **Activities** column provides a brief description of the work.

The **FTEs** column identifies the number of Full Time Equivalent (FTE) staff positions in the current-year adopted budget, mid-year and proposed changes (+/-), and the proposed budget for the next fiscal year. An FTE position represents one person-year.

The **Proposed Expenditures** column, found in the Work Program by Category document, identifies the expenditures in the current-year adopted budget, proposed changes (+/-) and the proposed budget for the next fiscal year.

The **Revenue Category** column identifies the revenue that supports the work. Revenue Category titles can be found within this section and revenue descriptions are in the FUND BALANCE & REVENUES section, “Explanation of Revenue Sources” within this document.

## **PROGRAM CATEGORIES**

### **ADVANCE CLEAN AIR TECHNOLOGY**

Identify technologies from anywhere in the world that may have application in reducing emissions from mobile and stationary sources in the SCAQMD's jurisdiction. Suggest strategies to overcome any barriers and, when appropriate, implement those strategies.

- (A) Identify short-term and long-term technical barriers to the use of low-emission clean fuels and transportation technologies.
- (B) Promote development and assess the use of clean fuels and low-emitting technologies.
- (C) Work with industry to promote research and development in promising low-emission technologies and clean fuels.
- (D) Provide technical and program support to the Mobile Source Air Pollution Reduction Review Committee (MSRC).
- (E) Conduct source tests and analysis of samples to assess effectiveness of low-emissions technology.
- (F) Implement and administer state-funded programs such as the Carl Moyer program for retrofitting, re-powering, or replacing diesel engines with newer and cleaner engines and the Proposition 1B program that provides funding for projects to reduce air pollution associated with freight movement along California's trade corridors.

### **ENSURE COMPLIANCE WITH CLEAN AIR RULES**

Ensure compliance with SCAQMD rules for existing major and small stationary sources.

- (A) Verify compliance with SCAQMD rules through inspections, sample collections, Visible Emissions Evaluations, certification of Continuous Emission Monitoring Systems (CEMS), and emissions audits.
- (B) Issue Notices of Violation for major violations when discovered or a Notice to Comply for minor violations or to request records.
- (C) Respond to and resolve public complaints concerning air pollution.
- (D) Participate in Hearing Board cases, investigate breakdowns and notifications of demolitions or renovations of structures which may contain asbestos, conduct periodic monitoring, and observe source tests.
- (E) Respond to industrial and chemical emergencies when requested by other agencies.
- (F) Provide training classes for compliance with various SCAQMD rules such as Gasoline Transfer and Dispensing (Rule 461), Asbestos Demolition and Renovation (Rule 1403), Chrome Plating Operations (Rule 1469), Fugitive Dust Plans (Rule 403 & 403.1), Sump and Wastewater Separators (Rule 1176) and Combustion Gas Portable Analyzer Training & Certification (Rules 1146, 1146.1 & 1110.2).



## **PROGRAM CATEGORIES**

### **CUSTOMER SERVICE AND BUSINESS ASSISTANCE**

Support local government, businesses, and the general public.

- (A) Provide local government, business and the public with accesses and input into the regulatory and policy processes of the SCAQMD.
- (B) Assist cities and others with AB 2766 projects.
- (C) Interact with local, state and federal agencies as well as others to share air quality information, resolve jurisdictional questions, and implement joint programs.
- (D) Support air pollution reduction through implementation of comprehensive public information, legislative and customer service programs.
- (E) Provide small business assistance services and support economic development and business retention activities.
- (F) Make presentations to and meet with regulated organizations, individuals, public agencies and the media.
- (G) Notify all interested parties of upcoming changes to air quality rules and regulations through public meetings, workshops, and printed and electronic information.
- (H) Resolve permit- and fee-related problems and provide technical assistance to industry.
- (I) Respond to Public Records Act requests.
- (J) Produce brochures, newsletters, television, radio and print media information and materials, and digital information.
- (K) Respond to letters and Internet inquiries from the public and to media inquiries and requests.

### **DEVELOP PROGRAMS TO ACHIEVE CLEAN AIR**

Develop a regional Air Quality Management Plan (AQMP) to achieve federal and state ambient air quality standards and to meet all other requirements of the federal and California Clean Air Acts.

- (A) Analyze air quality data and provide an estimation of pollutant emissions by source category.
- (B) Develop pollutant control strategies and project future air quality using computer models and statistical analysis of alternative control scenarios.
- (C) Analyze issues pertaining to air toxics, acid deposition, and potential socioeconomic and environmental impacts (CEQA) of SCAQMD plans and regulations.
- (D) Conduct outreach activities to solicit public input on proposed control measures.
- (E) Implement Rule 2201 On-Road Motor Vehicle Mitigation Options and process employee commute reduction program submittals and registrations. Provide one-on-one assistance to employers to ensure compliance with the rule.

## **PROGRAM CATEGORIES**

### **DEVELOP PROGRAMS TO ACHIEVE CLEAN AIR (Cont.)**

- (F) Develop and update emissions inventories; conduct in-house auditing of annual emission reports; conduct field audits.

### **DEVELOP RULES TO ACHIEVE CLEAN AIR**

Develop emission reduction regulations for sulfur dioxide, nitrogen dioxide, organic gases, particulate matter, toxics, and other pollutants to implement the regional AQMP, Tanner Air Toxics Process (AB 1807), National Emission Standards for Hazardous Air Pollutants (NESHAPS), and Prevention of Significant Deterioration (PSD) requirements.

- (A) Provide an assessment of control technologies, evaluation of control cost, source testing and analysis of samples to determine emissions.
- (B) Test and analyze products and processes to demonstrate pollution reduction potential.
- (C) Solicit public input through meetings and workshops.
- (D) Prepare rules to provide flexibility to industry, ensure an effective permit program and increase rule effectiveness.
- (E) Evaluate effectiveness of area source rules, evaluate area source emission inventories, and propose new rules or amendments to improve implementation of area source programs, including the certification/registration of equipment, and as necessary pursuant to statewide regulatory requirements.
- (F) Implement the AQMP. Develop feasibility studies and control measures.
- (G) Conduct research and analyze health effects of air pollutants and assess the health implications of pollutant reduction strategies.

### **MONITORING AIR QUALITY**

Operate and maintain within SCAQMD's jurisdiction a network of air quality monitoring sites for ozone, nitrogen oxides, sulfur oxides, particulate matter, carbon monoxide and other pollutants to obtain data regarding public exposure to air contaminants.

- (A) Analyze, summarize, and report air quality information generated from the monitoring sites.
- (B) Provide continuous records for assessment of progress toward meeting federal and state air quality standards.
- (C) Develop and prepare meteorological forecasts and models.
- (D) Respond to emergency requests by providing technical assistance to first-response public safety agencies.

## **PROGRAM CATEGORIES**

### **MONITORING AIR QUALITY (Cont.)**

- (E) Notify the public, media, schools, regulated industries and others whenever predicted or observed levels exceed the episode levels established under state law.
- (F) Conduct special studies such as MATES V, National Air Toxics Trends (NATTS), Port Air Quality Monitoring, Near Road NO<sub>2</sub> Monitoring, and TraPac Air Filtration Program.
- (G) Conduct measurement activities to identify and monitor potential sources of all toxics including high-risk facilities.
- (H) Deploy low-cost sensors to monitor air pollution within communities of the South Coast Air Basin and from specific sources.
- (I) Assess the ability of optical remote sensing technology to characterize and quantify emissions from refineries and other sources, and to serve as a useful tool for enhancing existing leak detection and repair programs.

### **OPERATIONAL SUPPORT**

Provide operational support to facilitate overall air quality improvement programs.

- (A) Provide services that enable SCAQMD offices to function properly. Services include facility administration, human resources and financial services.
- (B) Provide information management services in support of all SCAQMD operations, including automation of permitting and compliance records, systems analysis and design, computer programming and operations, records management, and the library.
- (C) Provide legal support and representation on all policy and regulatory issues and all associated legal actions.

### **TIMELY REVIEW OF PERMITS**

Ensure timely processing of permits for new sources based on compliance with New Source Review and other applicable local, state and federal air quality rules and regulations.

- (A) Process applications for Permits to Construct and/or to Operate for new construction, modification and change of conditions for major and non-major sources.
- (B) Process Title V permits (Initial, Renewal, and Revisions) and facility permits for RECLAIM sources.
- (C) Process applications for Administrative Changes, Change of Operator, Plans, Emission Reductions Credits (ERCs) and RECLAIM Trading Credits (RTCs).

## **PROGRAM CATEGORIES**

### **TIMELY REVIEW OF PERMITS (Cont.)**

- (D) Continue efforts to streamline and expedite permit issuance through:
  - (1) Equipment certification/registration programs
  - (2) Streamlined standard permits
  - (3) Enhancement of permitting systems (including electronic permitting)
  - (4) Expedited Permit Processing Program
  - (5) Maintaining adequate staff resources
  - (6) Improved training
  - (7) Revisiting policies and rules

### **POLICY SUPPORT**

Monitor, analyze and attempt to influence the outcome of state/federal legislation.

- (A) Track changes to the state/federal budgets that may affect SCAQMD.
- (B) Respond to Congressional and Senatorial inquiries regarding SCAQMD programs, policies or initiatives.
- (C) Assist SCAQMD consultants in identifying potential funding sources and securing funding for SCAQMD programs.
- (D) Provide support staff to the Governing Board, Board committees, and various advisory and other groups including but not limited to: the Air Quality Management Plan Advisory Group, the Environmental Justice Advisory Group, the Home Rule Advisory Group, the Local Government and Small Business Assistance Advisory Group, the Mobile Source Air Pollution Reduction Review Committee (MSRC) and MSRC Technical Advisory Committee, the Scientific, Technical and Modeling Peer Review Advisory Group, the Technology Advancement Advisory Group, as well as ad hoc committees established from time to time and various Rule working groups.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
DRAFT GOALS AND PRIORITY OBJECTIVES FOR FY 2017-2018**

**MISSION STATEMENT**

“To clean the air and protect the health of all residents in the South Coast Air District through practical and innovative strategies.”

**GOALS AND PRIORITY OBJECTIVES**

The following Goals and Priority Objectives have been identified as being critical to meeting SCAQMD’s Mission in Fiscal Year 2017-18.

**GOAL I.    Achieve Clean Air Standards.**

Priority Objective		Performance Indicator	Performance Measurement
1	Implementation of the 2016 AQMP	Adherence to adoption and implementation schedules for rules, working groups, assessments and programs as adopted in the 2016 AQMP.	Complete 6 rule adoptions and/or actions that result in achievements towards AQMP emissions reductions.
2	Implement the Action Plan for Toxics Facilities	Conduct monitoring and achieve emissions reductions at previously unknown high risk facilities.	Conduct monitoring of at least 10 facilities and reduce emissions from those found to have high toxics risk to the community.
3	Secure Incentive Funding for Emissions Reduction	Dollar amount of new funding sources for pollution reduction projects.	Secure \$400 Million of new funding sources.
4	Ensure Efficient Air Monitoring and Laboratory Operations	Achieve acceptable completion of valid data points out of the scheduled measurements in the SCAQMD air monitoring network for NAAQS pollutant before U.S. EPA deadline.	Achieve acceptable valid data completion submitted to U.S. EPA before deadline.
5	Ensure Timely Inspections of Facilities	Total number of Title V Inspections completed annually.	Complete 386 Title V Inspections.
6	Reduce Backlog of Permit Applications	Reduce number of permit applications in the backlog.	Reduce the number of pending permit applications to 3,800 or less.
7	Support Development of Cleaner Advanced Technology	Amount of Clean Fuels Program projects funded.	Fund \$10 Million of Clean Fuels program projects with a 1:4 leveraging ratio.

**GOAL II. Enhance Public Education and Equitable Treatment for All Communities.**

Priority Objective		Performance Indicator	Performance Measurement
1	Evaluation of Low Cost Air Quality Sensors	Evaluation and posting of results of low cost air quality sensors that have reached the market.	Evaluate and post results of 75% of sensors that have reached the market.
2	Outreach Events and Media Relations	Number of large community outreach events conducted in each County.	Conduct 4 large community outreach events, including 1 in each County.
3	Investigation of Community Complaints	Development of standardized acknowledgment time for community complaints.	Develop a process to measure and establish an appropriate acknowledgement time for community complaints.
4	Social Media Efforts	Percentage increase in number of social media followers.	10% increase in social media followers.
5	Engage Young Persons	Creation and number of meetings of a young persons advisory group.	Create a young persons advisory group and conduct 4 meetings.

**GOAL III. Operate Efficiently and Transparently.**

Priority Objective		Performance Indicator	Performance Measurement
1	Ensure Transparent Governance	Percentage of Committee and Board meeting agendas with materials made available to the public one week prior to the meeting.	100% of Committee and Board meeting agendas with materials made available to the public one week prior to the meeting.
2	Ensure Transparent Governance	Percentage of Stakeholder and Working Group meeting agendas with materials made available to the public one week prior to the meeting.	100% of Stakeholder and Working Group meeting agendas with materials made available to the public 48 hours prior to the meeting.
3	Maintain a Well Informed Staff	Number of all staff information sessions offered and conducted.	Offer and conduct 10 information sessions/training for all staff.
4	Partner with Public Agencies, Stakeholder Groups, & Business	Number of meetings with Permit Streamlining Task Force subcommittee and stakeholders.	Conduct 4 meetings of the Permit Streamlining Task Force subcommittee and stakeholders.
5	IT Systems Improvements	Number of completed Enterprise GIS improvement projects.	Complete 9 of the 15 Enterprise GIS projects identified in the Enterprise GIS Implementation Plan.
6	Timely Financial Monitoring	Timely budgetary financial reporting.	Submit quarterly budgetary financial reports to the Governing Board within 6 working days of the end of the quarter.

## REVENUE CATEGORIES

### I. **Allocatable**

A portion of SCAQMD revenue offsets operational support costs of the SCAQMD.

1a Allocatable SCAQMD: District-wide administrative and support services (e.g., Human Resources, Payroll, Information Management).

1b Allocatable Office: Administrative activities specific to a division/office.

### II. **Annual Operating Emissions Fees**

### III. **Permit Processing Fees**

### IV. **Annual Operating Permit Renewal Fees**

### V. **Federal Grants/Other Federal Revenue**

### VI. **Source Test/Sample Analysis Fees**

### VII. **Hearing Board Fees**

### VIII. **Clean Fuels Fees**

### IX. **Mobile Sources**

### X. **Air Toxics AB 2588**

### XI. **Transportation Programs**

XII - XIV. These revenue categories are no longer used.

### XV. **California Air Resources Board Subvention**

XVI. This revenue category is no longer used.

### XVII. **Other Revenue**

### XVIII. **Area Sources**

### XIX. **Portable Equipment Registration Program (PERP)**

For a description of the revenue categories listed above, please refer to the corresponding revenue account in the FUND BALANCE & REVENUES section, "Explanation of Revenue Sources" within this document.

**Advance Clean Air Technology  
Work Program by Category**

#	Program Code	Goal	Office	Program	Activities	FTEs		Expenditures			Revenue Categories					
						FY 2016-17	+/-	FY 2017-18	FY 2016-17	+/-		FY 2017-18				
1	08	001	I	LEG	AB2766/Mob Src/Legal Advice	AB2766 Leg Adv: Trans/Mob Source	0.05	-	0.05	\$	10,420	\$	183	\$	10,603	IX
2	04	003	III	FIN	AB2766/MSRC	MSRC Program Administration	0.35	-	0.35		49,680		2,814		52,494	IX
3	08	003	I	LEG	AB2766/MSRC	Legal Advice: MSRC Prog Admin	0.15	-	0.15		31,260		549		31,809	IX
4	44	003	I	STA	AB2766/MSRC	Mob Src Review Comm Prog Admin	0.50	-	0.50		81,155		980		82,134	IX
5	44	004	I	STA	AB2766/MSRC/Contract Admin	AB2766 Admin Discretionary Prog	3.00	-	3.00		486,929		5,877		492,806	IX
6	44	012	I	STA	AQMP/Control Tech Assessment	Tech Supp: Quantify Cost Effect	0.10	-	0.10		16,231		196		16,427	VIII
7	44	039	I	STA	Admin/Office Mgt/Tech Adv	Admin Support/Coordination	0.77	-	0.77		124,978		1,509		126,487	VIII
8	44	048	I	STA	Admin/Prog Mgmt/Tech Advance	Overall TA Program Mgmt/Coord	1.55	-	1.55		251,580		3,037		254,617	VIII
9	44	066	I	STA	AQIP Marine SCR DPF	AQIP Marine SCR DPF/Admin/Impl	0.15	-	0.15		24,346		294		24,640	IX
10	44	095	I	STA	CA Natural Gas Veh Partnership	CA Natural Gas Veh Partnership	0.05	-	0.05		8,115		98		8,213	VIII
11	04	130	III	FIN	Clean Fuels/Contract Admin	Clean Fuels Contract Admin/Monitor	0.15	-	0.15		21,291		1,206		22,497	VIII
12	44	130	I	STA	Clean Fuels/Contract Admin	Admin/Project Supp for TA Cont	6.57	(3.17)	3.40		1,066,374		(507,861)		558,514	VIII
13	08	131	I	LEG	Clean Fuels/Legal Advice	Legal Advice: Clean Fuels	0.05	-	0.05		10,420		183		10,603	VIII
14	44	132	I	STA	Clean Fuels/Mobile Sources	Dev/Impl Mobile Src Proj/Demo	4.35	1.65	6.00		706,047		1,564,566		2,270,613	VIII
15	44	134	I	STA	Clean Fuels/Stationary Combust	Dev/Demo Clean Combustion Tech	0.70	(0.20)	0.50		113,617		(31,482)		82,134	VIII
16	44	135	I	STA	Clean Fuels/Stationary Energy	Dev/Demo Alt Clean Energy	0.70	(0.15)	0.55		113,617		(23,269)		90,348	VIII
17	44	136	I	STA	Clean Fuels/Tech Transfer	Disseminate Low Emiss CF Tech	1.20	0.05	1.25		194,772		10,564		205,336	VIII
18	44	187	I	STA	DERA Sch Bus Repl	DERA Sch Bus Repl Admin/Impl	0.03	-	0.03		4,869		59		4,928	V
19	44	188	I	STA	DERA FY 13 Veh Repl	DERA Vehicle Repl Admin/Impl	0.20	-	0.20		32,462		392		32,854	XVII
20	44	190	I	STA	Diesel Projects EPA	Diesel Projects EPA/Admin/Impl	0.11	-	0.11		17,854		216		18,070	V
21	44	203	I	STA	EFMP Program Support	EFMP Program Support	-	1.19	1.19		-		195,480		195,480	XVII
22	44	356	I	STA	GGRF ZEDT Demo	GGRF ZEDT Demo Admin	1.10	-	1.10		178,541		2,155		180,696	XVII
23	44	361	I	STA	HD Trucks DOE ARRA	DOE HD Trucks Admin (ARRA)	2.00	-	2.00		324,619		3,918		328,538	V,XVII
24	44	453	I	STA	Mob Src: Emiss Inven Method	Rvw CARB/US EPA emissions inven methodology	1.50	-	1.50		243,464		2,939		246,403	VIII,IX
25	03	455	I	EO	Mobile Sources	Dev/Impl Mobile Source Strategies	0.10	(0.10)	-		24,903		(24,903)		-	IX
26	04	457	III	FIN	Mobile Source/Moyer Adm	Carl Moyer: Contract/Fin Admin	1.02	-	1.02		144,782		8,200		152,982	IX
27	08	457	I	LEG	Mob Src/C Moyer/Leg Advice	Moyer/Implem/Program Dev	0.10	-	0.10		20,840		366		21,206	IX
28	16	457	I	AHR	MS/Carl Moyer Admin	C Moyer/Contractor Compliance	0.50	(0.40)	0.10		90,896		(72,232)		18,663	IX
29	44	457	I	STA	Mob Src/C Moyer Adm/Outreach	Carl Moyer: Impl/Admin Grant	8.81	2.34	11.15		1,429,948		476,648		1,906,597	IX
30	44	459	I	STA	Mob Src/C Moyer/Impl/Prgr Dev	Moyer/Implem/Program Dev	2.80	-	2.80		454,467		5,485		459,952	IX
31	44	460	I	STA	VIP Admin	VIP Admin/Outreach/Impl	0.80	-	0.80		129,848		1,567		131,415	IX
32	44	497	I	STA	Plug-in Hybrid EV DOE ARRA	DOE Plug-in Hybrid EV Admin (ARRA)	0.75	-	0.75		121,732		1,469		123,202	V
33	44	533	I	STA	POLB AMECS Demo	POLB AMECS Demo-Admin/Impl	0.47	-	0.47		76,286		921		77,206	XVII
34	04	542	I	FIN	Prop 1B:Goods Movement	Contracts/Finance Admin	0.50	-	0.50		70,971		4,020		74,991	IX
35	16	542	I	AHR	Prop 1B:Goods Movement	Prop 1B: Goods Movement	0.50	(0.40)	0.10		90,896		(72,232)		18,663	IX
36	04	544	I	FIN	Prop 1B:Low Emiss Sch Bus	Grants/Finance Admin	0.05	-	0.05		7,097		402		7,499	IX
37	44	677	I	STA	School Bus/Lower Emission Prog	School Bus Program Oversight	0.70	-	0.70		113,617		1,371		114,988	IX
38	26	738	I	PRA	Target Air Shed EPA	Targeted Air Shed Admin/Impl	0.25	-	0.25		42,185		838		43,023	V,XVII
39	44	738	I	STA	Target Air Shed EPA	Targeted Air Shed Admin/Impl	0.15	-	0.15		24,346		294		24,640	V,XVII
40	44	740	I	STA	Tech Adv/Commercialization	Assess Cfs/Adv Tech Potential	0.25	-	0.25		40,577		490		41,067	VIII
41	44	741	I	STA	Tech Adv/Non-Combustion	Dev/Demo Non-Combustion Tech	0.10	-	0.10		16,231		196		16,427	VIII
42	44	816	I	STA	Transportation Research	Transport Research/Adv Systems	0.50	-	0.50		81,155		980		82,134	VIII

**Total Advance Clean Air Technology**

43.68	0.81	44.49	\$ 7,093,418	\$ 1,568,481	\$ 8,661,899
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Ensure Compliance Work Program by Category											
#	Program Code	Goal	Office	Program	Activities	FTEs		Expenditures			Revenue Categories
						FY 2016-17	+/-	FY 2017-18	+/-	FY 2016-17	FY 2017-18
										\$	\$
1	44	015	I	STA	Acid Rain Program	0.50	-	0.50	-	81,155	82,134
2	26	042	I	PRA	Admin/Office Mgmt/Compliance	0.50	(0.50)	-	-	84,370	-
3	44	042	I	STA	Admin/Office Mgmt/Compliance	0.37	-	0.37	-	60,055	60,779
4	26	046	I	PRA	Admin/Office Mgmt/Compliance	0.75	(0.75)	-	-	126,554	-
5	50	070	I	EP	CARB PERP Program	7.00	(7.00)	-	-	1,080,878	-
6	60	070	I	CE	CARB PERP Program	-	5.00	5.00	-	740,253	740,253
7	50	071	I	EP	Arch Ctg - Admin	0.10	(0.10)	-	-	15,441	-
8	08	072	I	LEG	Arch Ctg - End User	0.05	-	0.05	-	10,420	10,603
9	26	072	I	PRA	Arch Ctg - End User	1.00	(0.20)	0.80	-	168,739	137,673
10	44	072	I	STA	Arch Ctg - End User	5.00	(3.00)	2.00	-	811,548	328,538
11	50	072	I	EP	Arch Ctg - End User	0.10	(0.10)	-	-	15,441	-
12	08	073	I	LEG	Arch Ctg - Other	0.05	-	0.05	-	10,420	10,603
13	26	073	I	PRA	Arch Ctg - Other	1.00	(0.20)	0.80	-	168,739	137,673
14	50	073	I	EP	Arch Ctg - Other	4.50	(4.50)	-	-	694,850	-
15	26	076	I	PRA	Area Sources/Compliance	5.00	(0.30)	4.70	-	893,695	913,829
16	16	080	III	AHR	Auto Services	3.00	-	3.00	-	545,374	559,895
17	44	105	I	STA	CEMS Certification	6.15	-	6.15	-	998,204	1,010,253
18	35	111	II	LPA	Call Center/CUT SMOG	8.00	-	8.00	-	1,311,868	1,380,992
19	08	115	I	LEG	Case Disposition	5.00	-	5.00	-	1,041,993	1,060,295
20	50	152	III	EP	Compliance/IM Related Activiti	0.50	(0.50)	-	-	77,206	-
21	60	152	III	CE	Compliance/IM Related Activiti	-	0.50	0.50	-	274,025	274,025
22	08	154	I	LEG	Compliance/NOV Administration	1.20	(0.20)	1.00	-	250,078	212,059
23	50	155	I	EP	Compliance Guidelines	0.50	(0.50)	-	-	77,206	-
24	60	155	I	CE	Compliance Guidelines	-	2.50	2.50	-	370,127	370,127
25	50	156	I	EP	Perm Proc/Info to Compliance	3.00	-	3.00	-	463,233	510,480
26	50	157	I	EP	Compliance/Special Projects	5.00	(5.00)	-	-	772,055	-
27	60	157	I	CE	Compliance/Special Projects	-	5.00	5.00	-	740,253	740,253
28	50	158	I	EP	Compliance Testing	1.00	(1.00)	-	-	159,411	-
29	60	158	I	CE	Compliance Testing	-	0.50	0.50	-	240,025	240,025
30	44	175	I	STA	DB/Computerization	0.44	-	0.44	-	71,416	72,278
31	08	185	I	LEG	Database Management	0.25	0.50	0.75	-	87,100	214,044
32	26	215	I	PRA	Annual Emission Reporting	7.50	0.50	8.00	-	1,270,543	1,481,731
33	08	235	I	LEG	Enforcement Litigation	2.00	-	2.00	-	416,797	424,118
34	50	240	I	EP	Environmental Justice	-	0.50	0.50	-	85,080	85,080
35	26	358	I	PRA	GHG Rules-Compl	-	1.05	1.05	-	180,696	180,696
36	17	364	I	CB	Hearing Board/Abatement Orders	0.10	-	0.10	-	20,094	22,384
37	17	365	I	CB	Hearing Board/Variances/Appeal	3.20	-	3.20	-	668,399	801,778
38	50	365	I	EP	Hearing Bd/Variances	1.50	(0.75)	0.75	-	231,617	127,620
39	60	365	I	CE	Hearing Bd/Variances	-	2.00	2.00	-	296,101	296,101
40	08	366	I	LEG	Hearing Board/Legal	3.00	-	3.00	-	625,196	636,177

Ensure Compliance (Cont.) Work Program by Category												
#	Program Code	Goal	Office	Program	Activities	FTEs		Expenditures			Revenue Categories	
						FY 2016-17	+/-	FY 2017-18	+/-	FY 2016-17		+/-
41	50	375	I	EP	Inspections	79.20	(79.20)	-	\$ 12,245,807	\$ (12,245,807)	-	II,V,XV
42	60	375	I	CE	Inspections	-	83.10	83.10	-	12,303,011	12,303,011	II,V,XV
43	50	377	I	EP	Inspections/RECLAIM Audits	23.80	(17.80)	6.00	3,674,984	(2,654,024)	1,020,960	II,IV
44	60	377	I	CE	Inspections/RECLAIM Audits	-	15.00	15.00	-	2,220,760	2,220,760	II,IV
45	08	380	I	LEG	Interagency Coordination	0.20	-	0.20	41,680	732	42,412	II,V
46	08	403	III	LEG	Legal Rep/Litigation	3.50	-	3.50	913,895	27,811	941,706	Ia,II
47	44	450	I	STA	Microscopic Analysis	2.00	-	2.00	324,619	3,918	328,538	VI
48	08	465	I	LEG	Mutual Settlement	3.00	-	3.00	625,196	10,981	636,177	IV
49	50	492	I	EP	Customer Service	-	0.50	0.50	-	85,080	85,080	II,I,V,X,XV
50	44	500	I	STA	PM2.5 Program	11.30	-	11.30	1,834,099	22,138	1,856,237	II,I,V,X
51	50	538	I	EP	Port Comm AQ Enforcement	0.50	(0.50)	-	77,206	(77,206)	-	IX
52	60	538	I	CE	Port Comm AQ Enforcement	-	-	-	-	-	-	IX
53	60	539	I	CE	Procedure 5 Review	-	0.40	0.40	-	59,220	59,220	XVII
54	50	542	I	EP	Prop 1B-Goods Movement	0.30	(0.30)	-	46,323	(46,323)	-	IX
55	50	550	II	EP	Public Complaints/Breakdowns	10.00	(10.00)	-	1,544,111	(1,544,111)	-	II,IV,V,XV
56	60	550	II	CE	Public Complaints/Breakdowns	-	10.00	10.00	-	1,480,507	1,480,507	II,IV,V,XV
57	50	605	I	EP	RECLAIM/Admin Support	10.00	(3.50)	6.50	1,544,111	(438,071)	1,106,040	II,III,IV,XV
58	60	605	I	CE	RECLAIM/Admin Support	-	5.00	5.00	-	740,253	740,253	II,III,IV,XV
59	26	620	I	PRA	Refinery Pilot Project	0.25	-	0.25	42,185	838	43,023	II
60	26	645	I	PRA	Rule 1610 Plan Verification	0.50	0.25	0.75	84,370	44,699	129,069	V,IX
61	50	678	I	EP	School Siting	1.00	(0.75)	0.25	154,411	(111,871)	42,540	II
62	60	678	I	CE	School Siting	-	0.05	0.05	-	7,403	7,403	IV
63	50	680	I	EP	Small Business Assistance	0.50	-	0.50	77,206	7,874	85,080	III,IV
64	44	700	I	STA	Source Testing/Compliance	2.25	-	2.25	395,197	4,408	399,605	VI
65	44	704	I	STA	ST/Sample Analysis/Compliance	4.00	-	4.00	649,239	82,836	732,075	VI
66	44	707	I	STA	VOC Sample Analysis/Compliance	7.00	-	7.00	1,173,168	13,714	1,186,881	IV,XV
67	26	716	I	PRA	Spec Monitoring/R403	1.05	(1.05)	-	177,176	(177,176)	-	III,IV,IX,XV
68	44	716	I	STA	Special Monitoring	2.20	-	2.20	392,081	4,310	396,391	III,IV,IX,XV
69	50	751	I	EP	Title III Inspections	0.50	(0.50)	-	77,206	(77,206)	-	IV
70	60	751	I	CE	Title III Inspections	-	0.10	0.10	-	14,805	14,805	IV
71	50	771	I	EP	Title V Inspections	11.00	(11.00)	-	1,698,522	(1,698,522)	-	II,IV
72	60	771	I	CE	Title V	-	3.50	3.50	-	518,177	518,177	II,IV
73	04	791	III	FIN	Toxics/AB2588	0.15	-	0.15	36,291	1,206	37,497	X
74	08	791	I	LEG	Toxics/AB2588	0.05	-	0.05	10,420	183	10,603	X
75	27	791	III	IM	Toxics/AB2588	0.50	-	0.50	147,295	1,732	149,026	X
76	50	791	I	EP	Toxics/AB2588	0.25	-	0.25	38,603	3,937	42,540	X
77	60	791	I	CE	Toxics/AB2588	-	0.10	0.10	-	14,805	14,805	X
78	26	794	I	PRA	Toxics/AB2588	9.40	3.60	13.00	1,586,147	651,040	2,237,188	X
79	44	794	I	STA	Toxics/AB2588	1.25	3.00	4.25	202,887	495,255	698,142	X
80	44	795	I	STA	Toxics/Engineering	0.05	-	0.05	8,115	98	8,213	VI,X
81	08	805	III	LEG	Training	0.50	-	0.50	104,199	1,830	106,029	Ib
82	50	850	I	EP	VEE Trains	0.50	(0.50)	-	77,206	(77,206)	-	IX,XV
						263.96	(7.05)	256.91	\$ 43,314,046	\$ (511,556)	\$ 42,802,490	
Total Ensure Compliance												

**Customer Service and Business Assistance  
Work Program by Category**

#	Program Code	Goal	Office	Program	Activities	FTEs			Expenditures				Revenue Categories			
						FY 2016-17	+/-	FY 2017-18	FY 2016-17	+/-	FY 2017-18					
1	04	002	III	FIN	AB2766/Mobile Source	Prog Admin: Monitor/Dist/Audit	0.10	-	0.10	\$	24,194	\$	(9,196)	\$	14,998	IX
2	26	007	I	PRA	AB2766/MSRC	AB2766 Prov Tech Asst to Cities	1.10	0.12	1.22		185,613		24,338		209,951	IX
3	50	038	I	EP	Admin/Office Management	Dev/Coord Goals/Policies/Overs	5.00	(4.00)	1.00		772,055		(595,895)		176,160	lb
4	60	038	III	CE	Admin/Office Budget	Dev/Coord Goals/Policies/Overs	-	6.00	6.00		-		890,304		890,304	lb
5	35	046	III	LPA	Admin/Prog Mgmt	Admin Office/Units/SuppCoord Staff	3.02	1.00	4.02		495,230		198,718		693,948	lb
6	50	047	I	EP	Admin/Operations Support	Budget/Contracts/Reports/Projects	5.00	(3.00)	2.00		777,055		(434,235)		342,820	lb
7	60	047	I	CE	Admin/Operations Support	Budget/Contracts/Reports/Projects	-	6.00	6.00		-		892,804		892,804	lb
8	35	126	II	LPA	Clean Air Connections	Coord of region-wide community group	1.00	-	1.00		163,984		8,640		172,624	II,IX
9	04	170	I	FIN	Billing Services	Answer/Resp/Resolv Prob & Inq	8.00	-	8.00		1,151,042		64,318		1,215,360	II,III,IV
10	50	200	I	EP	Economic Dev/Bus Retention	Perm Proc/Public Participation	0.10	-	0.10		15,441		1,575		17,016	III
11	35	205	II	LPA	Environmental Education	Curriculum Dev/Project Coord	0.25	-	0.25		40,996		2,160		43,156	II,IX,XV
12	26	216	I	PRA	AER Public Assistance	AER Design/Impl/Monitor Emiss	2.00	-	2.00		337,478		6,705		344,183	II
13	35	240	I	LPA	Environmental Justice	Impl Board's EJ Pgrms/Policies	2.00	-	2.00		327,967		17,281		345,248	II,IV
14	04	260	III	FIN	Fee Review	Cmte Mtg/Fee-Related Complaint	0.10	-	0.10		14,194		804		14,998	II,III,IV,XV
15	35	260	III	LPA	Fee Review	Cmte Mtg/Fee-Related Complaint	0.50	-	0.50		81,992		4,320		86,312	II,III,IV,XV
16	50	260	III	EP	Fee Review	Fee Review Committee	0.45	-	0.45		69,485		7,087		76,572	II,III,IV
17	04	355	III	FIN	Grants Management	Grant Anlyz/Eval/Negot/Acc/Rpt	1.00	-	1.00		141,943		8,040		149,982	IV,V,XV
18	35	381	III	LPA	Interagency Liaison	Interact Gov Agns/Promote SCAQMD	0.15	-	0.15		24,598		1,296		25,894	la,XV
19	03	390	I	EO	Local Govt Policy Development	Policy Development	0.05	(0.05)	-		12,451		(12,451)		-	la,IX
20	35	390	I	LPA	Intergov/Geographic Deployment	Dev/Impl Local Govt Outreach	9.50	-	9.50		1,595,843		82,084		1,677,928	II,IX
21	08	404	I	LEG	Legal Rep/Legislation	Draft Legis/SCAQMD Position/Mtgs	0.05	0.20	0.25		10,420		42,595		53,015	II,IX
22	50	425	I	EP	Lobby Permit Services	Supp Perm Proc/Customer Svc	1.00	-	1.00		154,411		15,749		170,160	III
23	27	481	III	IM	New System Development	Dev sys in supp of Dist-wide	1.75	-	1.75		593,731		(235,939)		357,792	la,III
24	03	490	II	EO	Outreach	Publ Awareness Clean Air Prog	1.00	(0.03)	0.97		249,026		64,013		313,039	la
25	35	491	II	LPA	Outreach/Business	Chambers/Business Meetings	1.00	-	1.00		176,584		(3,960)		172,624	II,IV
26	35	492	II	LPA	Public Education/Public Events	Pub Events/Conf/Rideshare Fair	1.00	-	1.00		573,984		8,640		582,624	II,V,IX,XV
27	60	492	II	CE	Outreach/Business	Pub Events/Conf/Rideshare Fair	-	0.20	0.20		-		29,610		29,610	IX
28	35	496	II	LPA	Outreach/Visiting Dignitary	Tours/Briefings-Dignitary	0.25	-	0.25		40,996		2,160		43,156	la
29	35	514	I	LPA	Permit: Expired Permit Program	Assist w Permit Reinstatement	0.30	-	0.30		49,195		2,592		51,787	IV
30	50	520	I	EP	Perm Proc/Pre-Appl Mtg Outreac	Pre-App Mtgs/Genl Prescreening	4.00	(3.00)	1.00		617,644		(447,484)		170,160	III
31	16	540	III	AHR	Print Shop	Printing/Collating/Binding	4.00	-	4.00		738,165		19,361		757,526	la
32	35	555	II	LPA	Public Information Center	Inform public of unhealthy air	1.00	-	1.00		253,984		8,640		262,624	II,V,IX
33	03	565	III	EO	Public Records Act	Comply w/ Public Req for Info	0.05	(0.04)	0.01		12,451		(9,224)		3,227	la
34	04	565	I	FIN	Public Records Act	Comply w/ Public Rec Requests	0.02	-	0.02		2,839		161		3,000	la
35	08	565	III	LEG	Public Records Act	Comply w/ Public Rec Requests	1.00	0.50	1.50		208,399		109,690		318,088	la
36	16	565	III	AHR	Public Records Act	Comply w/ Public Rec Requests	0.05	-	0.05		9,090		242		9,332	la
37	17	565	III	CB	Public Records Act	Comply w/ Public Rec Requests	0.02	-	0.02		4,019		458		4,477	la
38	26	565	III	PRA	Public Records Act	Comply w/ Public Rec Requests	0.53	0.04	0.57		89,432		8,660		98,092	la
39	27	565	III	IM	Public Records Act	Comply w/ Public Req for Info	4.75	-	4.75		770,469		117,081		887,550	la
40	35	565	III	LPA	Public Records Act	Comply w/ Public Req for Info	0.10	-	0.10		16,398		864		17,262	la

Customer Service and Business Assistance (Cont.) Work Program by Category												
#	Program Code	Goal	Office	Program	Activities	FTEs			Expenditures			Revenue Categories
						FY 2016-17	+/-	FY 2017-18	FY 2016-17	+/-	FY 2017-18	
41	44 565	III	STA	Public Records Act	Comply w/ Public Req for Info	0.17	-	0.17	\$ 27,593	\$ 333	\$ 27,926	la
42	50 565	III	EP	Public Records Act	Comply w/ Public Req for Info	0.50	(0.25)	0.25	77,206	(34,666)	42,540	la
43	60 565	III	CE	Public Records Act	Comply w/ Public Req for Info	-	2.00	2.00	-	296,101	296,101	la
44	04 631	III	FIN	Cash Mgmt/Refunds	Research/Doc/Prep/Proc Refunds	0.30	-	0.30	42,583	2,412	44,995	III,IV,XI
45	35 679	III	LPA	Small Business Assistance	Small Business/Financial Assistance	1.00	-	1.00	163,984	8,640	172,624	III
46	08 681	III	LEG	Small Business/Legal Advice	Legal Advice: SB/Fee Review	0.05	-	0.05	10,420	183	10,603	II,III
47	50 690	I	EP	Source Education	Prov Tech Asst To Industries	2.80	-	2.80	432,351	44,097	476,448	III,IV,V,XV
48	60 690	I	CE	Source Education	Prov Tech Asst To Industries	-	0.40	0.40	-	59,220	59,220	III,IV,V,XV
49	44 701	I	STA	Source Testing/Customer Svc	Conduct ST/Prov Data/Cust Svc	0.05	-	0.05	8,115	98	8,213	VI
50	44 709	I	STA	VOC Sample Analysis/SBA/Other	VOC Analysis & Reptg/Cust Svc	0.50	-	0.50	81,155	980	82,134	VI
51	35 710	I	LPA	Speakers Bureau	Coordinate/conduct speeches	0.10	-	0.10	16,398	864	17,262	la
52	16 720	I	AHR	Subscription Services	Rule & Gov Board Materials	1.70	-	1.70	309,045	8,228	317,274	IV,XVII
53	35 791	I	LPA	Toxics/AB2588	Outreach/AB 2588 Air Toxics	0.01	-	0.01	1,640	86	1,726	X
54	26 833	II	PRA	Rule 2202 ETC Training	Rule 2202 ETC Training	1.30	(0.37)	0.93	244,361	(59,316)	185,045	XI
Total Customer Service & Business Assistance						69.67	5.72	75.39	\$ 12,217,648	\$ 1,219,867	\$ 13,437,515	

Develop Programs Work Program by Category												
#	Program Code	Goal	Office	Program	Activities	FTEs		Expenditures			Revenue Categories	
						FY 2016-17	+/-	FY 2017-18	+/-	FY 2016-17		+/-
1	26 002	I	PRA	AB2766/Mobile Source	AB2766 Mobile Source Outreach	0.90	0.14	1.04	\$ 27,110	\$ 151,865	\$ 178,975	IX
2	04 009	I	FIN	AB 1318 Mitigation	AB 1318 Projects Admn/Impl	0.13	-	0.13	1,045	18,453	19,498	XVII
3	08 009	I	LEG	AB 1318 Mitigation	AB 1318 Projects Admn/Impl	0.05	-	0.05	183	10,420	10,603	XVII
4	26 009	I	PRA	AB 1318 Mitigation	AB 1318 Projects Admn/Impl	0.25	0.05	0.30	9,443	42,185	51,627	XVII
5	44 009	I	STA	AB 1318 Mitigation	AB 1318 Projects Admn/Impl	0.75	-	0.75	1,469	121,732	123,202	XVII
6	03 010	I	EO	AQMP	Develop/Implement AQMP	0.05	-	0.05	3,685	12,451	16,136	II,IX
7	08 010	I	LEG	AQMP	AQMP Revision/CEQA Review	0.20	-	0.20	732	41,680	42,412	II,IV,IX
8	26 010	I	PRA	AQMP	AQMP Special Studies	2.00	-	2.00	6,705	345,478	352,183	IV,V,IX,XV
9	03 028	I	EO	Admin/SCAQMD Policy	Dev/Coord Goals/Policies/Overs	2.00	(1.56)	0.44	(356,055)	648,052	291,997	la
10	26 038	I	PRA	Admin/Office Management	Coordinate Off/Admin Activities	0.75	3.80	4.55	656,461	126,554	783,016	lb
11	26 049	I	PRA	Admin/Prog Mgmt/AQMP	Admin: AQMP Development	1.00	(1.00)	-	(168,739)	168,739	-	lb
12	26 057	I	PRA	Admin/Transportation Prog Mgmt	Admin: Transportation Programs	0.75	(0.75)	-	(126,554)	126,554	-	lb
13	26 068	II	PRA	SCAQMD Projects	Prepare Environmental Assessments	4.10	(0.75)	3.35	(115,324)	881,830	766,506	II,IV,IX
14	44 069	I	STA	AQIP Evaluation	AQIP Contract Admin/Evaluation	0.65	-	0.65	1,273	105,501	106,775	IX
15	26 102	II	PRA	CEQA Document Projects	Review/Prepare CEQA Comments	4.00	(0.50)	3.50	(72,637)	674,956	602,320	II,IX
16	26 104	I	PRA	CEQA Policy Development	ID/Develop/Impl CEQA Policy	0.90	0.30	1.20	54,644	161,865	216,510	IV,IX
17	26 128	I	PRA	Cin Communities Pln	Cin Communities Plan Admn/Impl	0.20	0.05	0.25	9,275	33,748	43,023	II,IX
18	26 217	I	PRA	Emissions Inventory Studies	Dev Emiss DB/Dev/Update Emiss	2.00	(1.30)	0.70	(217,014)	337,478	120,464	II,V,IX,XV
19	26 218	I	PRA	AQMP/Emissions Inventory	Dev Emiss Inv: Forecasts/RFPs	1.30	-	1.30	219,361	219,361	223,719	II,IX
20	26 219	I	PRA	Emissions Field Audit	Emissions Field Audit	0.50	-	0.50	84,370	84,370	86,046	II
21	44 396	I	STA	Lawnmower Exchange	Lawn Mower Admin/Impl/Outreach	0.30	-	0.30	48,693	48,693	49,281	XVII
22	26 397	II	PRA	Lead Agency Projects	Prep Envrnmt Assmts/Perm Proj	1.10	0.65	1.75	185,613	185,613	301,160	III
23	26 448	I	PRA	Mobile Src Strategies-Off Road	CARB Off-Road Mob Src ctrl strategy for SIP	-	1.00	1.00	-	172,091	172,091	XVII
24	44 448	I	STA	Mobile Src Strategies-Off Road	CARB Off-Road Mob Src ctrl strategy for SIP	0.15	(0.15)	-	(24,346)	24,346	-	XVII
25	26 451	I	PRA	Mob Src/CARB/EPA Monitoring	CARB/US EPA Mob Src Fuel Policies	-	1.50	1.50	-	258,137	258,137	IX
26	44 451	I	STA	Mob Src/CARB/EPA Monitoring	CARB/US EPA Mob Src Fuel Policies	1.50	(1.50)	-	(243,464)	243,464	-	IX
27	26 452	I	PRA	Mob Src/CEC/US DOE Monitoring	CEC/US DOE Mob Src rulemaking proposals	-	1.00	1.00	-	172,091	172,091	IX,XVII
28	44 452	I	STA	Mob Src/CEC/US DOE Monitoring	CEC/US DOE Mob Src rulemaking proposals	1.00	(1.00)	-	(162,310)	162,310	-	IX,XVII
29	44 458	I	STA	Mobile Source Strategies	Implement Fleet Rules	0.85	0.15	1.00	26,306	137,963	164,269	VIII
30	26 503	I	PRA	PM Strategies	PM10 Plan/Analyze/Strategy Dev	4.95	(1.55)	3.40	(250,148)	835,258	585,111	II,V,XV
31	44 542	I	STA	Prop 18:Goods Movement	Prop 18:Goods Movement	9.87	(0.17)	9.70	291,411	1,601,996	1,893,407	IX
32	35 560	I	LPA	Public Notification	Public notif of rules/hearings	0.50	-	0.50	4,320	101,992	106,312	II,IV,IX
33	26 600	I	PRA	Credit Generation Programs	Dev RFP/AQMP Ctrl Strats/Inter	-	-	-	-	-	-	II,V,IX
34	26 685	I	PRA	Socio-Economic	Apply econ models/Socio-econ	4.00	0.10	4.10	56,118	1,129,456	1,185,575	II,IV
35	44 702	I	STA	ST Methods Development	Eval ST Methods/Validate	0.95	-	0.95	1,861	154,194	156,055	II
36	44 705	I	STA	ST Sample Analysis/Air Program	Analyze ST Samples/Air Prgms	0.25	-	0.25	490	40,577	41,067	II
37	26 745	I	PRA	Rideshare	Dist Rideshare/Telecommute Prog	1.05	(0.44)	0.61	(72,200)	177,176	104,976	IX
38	26 816	I	PRA	Transportation Regional Progs	Dev AQMP Meas/Coord w/Reg Agn	1.00	(0.65)	0.35	(108,507)	168,739	60,232	V,IX
39	26 834	I	PRA	Rule 2202 Implement	Rule 2202 Proc/Sub Plans/Tech Eval	3.40	(0.85)	2.55	(134,880)	573,713	438,833	XI
40	26 836	I	PRA	Rule 2202 Support	R2202 Supt/CmptnMaint/WebSubmt	3.00	(0.41)	2.59	(60,501)	521,217	460,717	V,XI
Total Develop Programs						56.35	(3.84)	52.51	\$ (235,660)	\$ 10,419,982	\$ 10,184,322	

Develop Rules Work Program by Category										
#	Program Code	Goal	Office	Program	Activities	FTEs		Expenditures		Revenue Categories
						FY 2016-17	+/-	FY 2017-18	+/-	FY 2017-18
						\$		\$		lb
1	44	043	I	STA	Admin/Office Mgmt/Rules	0.15	-	24,346	294	24,640
2	26	050	I	PRA	Admin/Rule Dev/PRA	1.25	(0.65)	210,924	(107,669)	103,255
3	26	071	I	PRA	Arch Ctgs - Admin	1.00	0.10	168,739	20,561	189,301
4	26	077	I	PRA	Area Sources/Rulemaking	2.00	0.05	337,478	15,309	352,787
5	26	084	I	PRA	Blk Carbon Stdy EPA	0.20	(0.20)	33,748	(33,748)	-
6	26	165	I	PRA	Conformity	0.40	(0.15)	67,496	(24,473)	43,023
7	26	362	II	PRA	Health Effects	1.90	0.35	320,604	66,601	387,206
8	03	385	I	EO	Credit Generation Programs	0.02	(0.02)	4,981	(4,981)	-
9	26	385	I	PRA	Criteria Pollutants/Mob Srcs	0.75	-	126,554	2,514	129,069
10	26	449	I	PRA	Mob Src/SCAQMD Rulemaking	-	0.81	-	139,394	139,394
11	44	449	I	STA	Mob Src/SCAQMD Rulemaking	2.00	(2.00)	324,619	(324,619)	-
12	44	456	I	STA	MS & AQMP Control Strategies	0.30	-	48,693	588	49,281
13	26	460	I	PRA	Regional Modeling	5.30	-	1,034,317	17,767	1,052,084
14	03	650	I	EO	Rules	0.04	(0.04)	9,961	(9,961)	-
15	50	650	I	EP	Rulemaking	0.50	(0.25)	77,206	(34,666)	42,540
16	60	650	I	CE	Rulemaking	-	-	-	-	-
17	08	651	I	LEG	Rules/Legal Advice	1.00	-	208,399	3,660	212,059
18	44	653	I	STA	Rulemaking/BACT	2.00	-	324,619	3,918	328,538
19	26	654	I	PRA	Rulemaking/NOX	2.70	(0.20)	455,596	(25,367)	430,228
20	26	655	I	PRA	NSR/Adm Rulemaking	2.00	0.50	337,478	92,750	430,228
21	26	656	I	PRA	Rulemaking/VOC	3.00	2.70	656,217	374,703	1,030,921
22	44	657	I	STA	Rulemaking/Support PRA	0.05	-	8,115	98	8,213
23	50	657	I	EP	Rulemaking/Support PRA	0.50	(0.25)	77,206	(34,666)	42,540
24	60	657	I	CE	Rulemaking/Support PRA	-	0.50	-	74,025	74,025
25	26	659	I	PRA	Rulemaking/Toxics	7.50	2.00	1,265,543	369,325	1,634,868
26	08	661	I	LEG	Rulemaking/RECLAIM	0.05	0.20	10,420	42,595	53,015
27	26	661	I	PRA	Rulemaking/RECLAIM	0.57	1.93	96,181	334,047	430,228
28	44	706	I	STA	ST Sample Analysis/Air Program	0.25	-	40,577	490	41,067
29	44	708	I	STA	VOC Sample Analysis/Rules	0.25	-	40,577	490	41,067
30	50	752	I	EP	Title III Rulemaking	0.25	-	38,603	3,937	42,540
31	50	773	I	EP	Title V & NSR Rulemaking-Supp	0.25	-	38,603	3,937	42,540
Total Develop Rules						36.18	5.38	6,387,801	966,856	7,354,657

Monitoring Air Quality Work Program by Category											
#	Program Code	Goal	Office	Program	Activities	FTEs		Expenditures			Revenue Categories
						FY 2016-17	+/-	FY 2017-18	+/-	FY 2017-18	
						\$		\$		\$	
1	44 038	I	STA	Admin/Office Mgmt/Monitoring	Overall Program Mgmt/Coord	1.40	-	227,234	\$ 2,743	\$ 229,976	lb
2	44 046	I	STA	Admin/Program Management	STA Program Administration	2.00	-	336,619	3,918	340,538	lb
3	26 061	I	PRA	Air Quality Evaluation	Air Quality Evaluation	1.05	1.20	177,176	210,030	387,206	IX
4	44 063	I	STA	Ambient Air Analysis	Analyze Criteria/Tox/Pollutants	7.91	1.00	1,283,869	179,765	1,463,635	II,V,IX
5	44 064	I	STA	Ambient Network	Air Monitoring/Toxics Network	19.05	0.80	3,199,599	168,736	3,368,335	II,V,V,IX
6	44 065	I	STA	Air Quality Data Management	AM Audit/Validation/Reporting	1.00	-	162,310	1,959	164,269	II,V,IX
7	44 067	II	STA	Ambient Lead Monitoring	Lead Monitoring/Analysis/Reporting	0.50	-	81,155	980	82,134	IV
8	44 073	I	STA	Arch Ctg - Other	Sample Analysis/Rpts	2.00	-	324,619	3,918	328,538	XVIII
9	44 079	II	STA	AQ SPEC	AQ SPEC	3.00	-	486,929	5,877	492,806	XVII
10	44 081	I	STA	Air Filtration EPA	Air Filtration EPA/Admn/Impl	0.25	(0.10)	40,577	(15,937)	24,640	V
11	44 082	I	STA	Air Filtration Other	Air Filtration Other/Admn/Impl	0.25	(0.10)	40,577	(15,937)	24,640	XVII
12	44 084	I	STA	Blk Carbon Stdy EPA	EPA Blck Carbon Climate Study	-	0.20	-	32,854	32,854	XVII
13	50 210	II	EP	Emergency Response	Emerg Tech Asst to Public Saf	0.25	(0.25)	38,603	(38,603)	-	II,XV
14	60 210	II	CE	Emergency Response	Emerg Tech Asst to Public Saf	-	0.10	-	14,805	14,805	IV,XV
15	44 240	I	STA	Environmental Justice	Implement Environmental Justice	0.45	-	73,039	882	73,921	II,IX
16	44 248	I	STA	EPA Community Scale AQ-SPEC	EPA Community Scale AQ-SPEC	1.00	-	162,310	1,959	164,269	V,XVII
17	26 443	I	PRA	MATES V	MATES V	-	0.30	-	101,627	101,627	II,IX
18	26 445	I	PRA	Meteorology	ModelDev/Data Analysis/Forecast	2.15	(0.10)	437,789	39,998	477,787	II,V,IX
19	44 468	I	STA	NATTS(Natl Air Tox Trends Sta)	NATTS (Natl Air Tox Trends)	1.50	-	243,464	2,939	246,403	II,V,IX
20	44 469	I	STA	Near Roadway Mon	Near Roadway Monitoring	1.50	-	243,464	2,939	246,403	IV,V,IX
21	44 505	I	STA	PM Sampling Program (EPA)	PM Sampling Program - Addition	10.60	-	1,720,482	20,766	1,741,249	V
22	44 507	I	STA	PM Sampling Spec	PM Sampling Special Events	0.10	-	16,231	196	16,427	V
23	26 530	I	PRA	Photochemical Assessment	Photochemical Assessment	0.25	-	42,185	838	43,023	II,V
24	44 530	I	STA	Photochemical Assessment	Photochemical Assess & Monitor	3.00	-	486,929	5,877	492,806	V,IX
25	44 585	I	STA	Quality Assurance	Quality Assurance Branch	3.00	-	486,929	65,877	552,806	II,V,IX
26	44 663	I	STA	Salton Sea Monit	Mon/Analyze Hydrogen Sulfide	0.25	-	40,577	490	41,067	XVII
27	44 715	II	STA	Spec Monitoring/Emerg Response	Emergency Response	0.50	-	81,155	980	82,134	II
28	44 821	II	STA	TraPac Air Filtr Prg	Admin/Tech Suppt/Reptg/Monitor	0.15	0.85	24,346	139,922	164,269	XVII
Total Monitoring Air Quality						63.11	3.90	\$ 10,458,169	\$ 940,398	\$ 11,398,567	

**Operational Support  
Work Program by Category**

#	Program Code	Goal	Office	Program	Activities	FTEs		Expenditures				Revenue Categories				
						FY 2016-17	+/-	FY 2017-18		FY 2016-17	+/-		FY 2017-18			
1	04	020	III	FIN	Admin/SCAQMD Budget	Analyze/Prepare/Impl/Track WP	2.50	0.15	2.65	\$	354,857	\$	42,597	\$	397,454	la
2	04	021	III	FIN	Admin/SCAQMD Contracts	Contract Admin/Monitor/Process	3.20	-	3.20		454,217		25,727		479,944	la
3	04	023	III	FIN	Admin/SCAQMD Capital Assets	FA Rep/Reconcile/Inv/Acct	0.70	-	0.70		99,360		5,628		104,988	la
4	17	024	III	CB	Admin/SCAQMD/GB/HB Mgmt	Admin Governing/Hearing Brds	1.25	-	1.25		251,171		28,625		279,796	la,VII,XV
5	08	025	III	LEG	Admin/SCAQMD-Legal Research	Legal Research/Staff/Exec Mgmt	1.20	(0.10)	1.10		250,078		(16,813)		233,265	la
6	16	026	III	AHR	SCAQMD Mail	Posting/Mailing/Delivery	2.30	-	2.30		418,120		11,133		429,252	la
7	03	038	III	EO	Admin/Office Management	Budget/Program Management	1.00	1.00	2.00		249,026		73,695		322,721	lb
8	04	038	III	FIN	Admin/Office Management	Fin Mgmt/Oversee Activities	3.00	1.75	4.75		425,828		286,588		712,417	lb
9	08	038	III	LEG	Admin/Office Management	Attorney Timekeeping/Perf Eval	3.50	-	3.50		736,895		12,811		749,706	lb
10	16	038	III	AHR	Admin/Office Management	Reports/Proj/Budget/Contracts	4.45	(0.60)	3.85		813,971		(90,440)		723,531	lb
11	27	038	III	IM	Admin/Office Management	Overall Direction/Coord of IM	3.00	(0.75)	2.25		550,168		57,103		607,271	lb
12	04	045	III	FIN	Admin/Office Budget	Office Budget/Prep/Impl/Track	0.05	-	0.05		7,097		402		7,499	lb
13	44	052	I	STA	Admin/Prog Mgmt/Mob Src	Admin: Mobile Source	1.80	(1.80)	-		292,157		(292,157)		-	lb
14	16	060	III	AHR	Equal Employment Opportunity	Program Dev/Monitor/Reporting	0.10	-	0.10		18,179		484		18,663	la
15	04	071	I	FIN	Arch Ctgs - Admin	Cost Analysis/Payments	0.04	-	0.04		5,678		322		5,999	XVIII
16	08	071	I	LEG	Arch Ctgs - Admin	Rule Dev/TA/Reinterpretations	0.05	-	0.05		10,420		183		10,603	XVIII
17	27	071	I	IM	Arch Ctgs - Admin	Database Dev/Maintenance	0.25	-	0.25		45,847		866		46,713	XVIII
18	04	085	III	FIN	Building Corporation	Building Corp Acct/Fin Reports	0.02	-	0.02		2,839		161		3,000	la
19	16	090	III	AHR	Building Maintenance	Repairs & Preventative Maint	7.00	-	7.00		1,275,789		33,882		1,309,671	la
20	16	092	III	AHR	Business Services	Building Services Admin/Contracts	2.40	0.15	2.55		436,299		39,611		475,910	la
21	08	102	II	LEG	CEQA Document Projects	CEQA Review	1.00	(0.50)	0.50		208,399		(102,369)		106,029	II,III,IX
22	27	160	III	IM	Computer Operations	Oper/Manage Host Computer Sys	5.25	-	5.25		1,370,144		19,782		1,389,926	la
23	27	184	III	IM	Database Information Support	Ad Hoc Reports/Bulk Data Update	1.00	-	1.00		203,389		3,463		206,853	la
24	27	185	III	IM	Database Management	Dev/Maintain Central Database	2.25	-	2.25		412,626		7,792		420,418	la
25	27	215	I	IM	Annual Emission Reporting	System Enhancements for GHG	0.50	-	0.50		91,695		1,732		93,426	II,XVII
26	16	225	III	AHR	Employee Benefits	Benefits Analysis/Orient/Records	1.50	-	1.50		272,687		7,260		279,947	la
27	16	226	III	AHR	Classification & Pay	Class & Salary Studies	0.30	-	0.30		119,537		(63,548)		55,989	la
28	08	227	III	LEG	Employee/Employment Law	Legal Advice: Employment Law	1.00	(0.50)	0.50		208,399		(102,369)		106,029	la
29	16	228	III	AHR	Recruitment & Selection	Recruit Candidates for SCAQMD	3.25	-	3.25		614,322		15,731		630,052	la
30	16	232	III	AHR	Position Control	Track Positions/Workforce Anlys	0.55	-	0.55		99,985		2,662		102,647	la
31	04	233	III	FIN	Employee Relations	Assist HR/Interpret Salary Res	0.10	-	0.10		14,194		804		14,998	la
32	16	233	III	AHR	Employee Relations	Meet/Confer/Labor-Mgmt/Grievance	2.20	-	2.20		399,941		10,648		410,589	la
33	16	255	III	AHR	Facilities Services	Phones/Space/Keys/Audio-Visual	1.00	-	1.00		183,791		4,840		188,632	la
34	04	265	III	FIN	Financial Mgmt/Accounting	Record Accts Rec & Pay/Rpts	6.20	-	6.20		923,045		51,846		974,891	la
35	04	266	III	FIN	Financial Mgmt/Fin Analysis	Fin/SCAQMD Stat Analysis & Audit	0.80	-	0.80		113,554		6,432		119,986	la
36	04	267	III	FIN	Financial Mgmt/Treasury Mgmt	Treas Mgt Anlyz/Trk/Proj/Invst	0.90	0.10	1.00		211,398		23,234		234,632	la
37	04	268	III	FIN	Financial Systems	CLASS/Rev/Act/PR/Sys Analyze	0.10	-	0.10		14,194		804		14,998	la
38	02	275	II	GB	Governing Board	Rep of Dist Meet/Conf/Testimony	-	-	-		1,557,882		154,015		1,711,896	la
39	08	275	III	LEG	Governing Board	Legal Advice:Attend Board/Cmte Mtgs	1.00	-	1.00		208,399		3,660		212,059	la
40	17	275	III	CB	Governing Board	Attend/Record/Monitor Meetings	1.40	-	1.40		281,312		32,060		313,372	la
41	35	350	III	LPA	Graphic Arts	Graphic Arts	2.00	-	2.00		327,967		36,681		364,648	la
42	27	370	III	IM	Information Technology Svcs	Enhance Oper Effic/Productivity	2.75	-	2.75		527,071		9,524		536,595	la
43	08	401	III	LEG	Legal Advice/SCAQMD Programs	General Advice: Contracts	2.00	-	2.00		476,797		(2,679)		474,118	la

A prorated share of the District General Budget has been allocated to each line in the work program based on the number of FTEs reflected on the line.



**Operational Support (Cont.)  
Work Program by Category**

#	Program Code	Goal	Office	Program	Activities	FTEs		Expenditures			Revenue Categories				
						FY 2016-17	+/-	FY 2017-18	+/-	FY 2016-17		\$	+/-	FY 2017-18	
44	27 420	III	IM	Library	General Library Svcs/Archives	0.25	-	0.25	\$	54,197	\$	866	\$	55,063	la
45	04 447	I	FIN	Mobile Sources/Accounting	Record Act Rec & Pay/Special Funds	0.65	-	0.65		92,263		5,226		97,489	IX
46	27 470	III	IM	Network Operations/Telecomm	Operate/Maintain/Implem SCAQMD	9.25	-	9.25		2,164,216		(110,169)		2,054,047	la
47	27 480	III	IM	New System Development	Dev sys for special oper needs	3.00	(0.50)	2.50		617,364		(58,037)		559,327	II,IV
48	04 493	II	FIN	Outreach/SB/MB/DVBE	Outreach/Incr SB/DVBE Partic	0.05	-	0.05		7,097		402		7,499	la
49	04 510	III	FIN	Payroll	Ded/Ret Rpts/PR/St & Fed Rpts	3.60	-	3.60		558,494		28,943		587,437	la
50	04 570	III	FIN	Purchasing	Purch/Track Svcs & Supplies	2.50	-	2.50		354,857		20,099		374,956	la
51	04 571	III	FIN	Purchasing/Receiving	Receive/Record SCAQMD Purchases	1.20	-	1.20		170,331		9,648		179,979	la
52	04 572	III	FIN	Purchasing-Receiving/Stockroom	Track/Monitor SCAQMD Supplies	1.00	-	1.00		141,943		8,040		149,982	la
53	27 615	III	IM	Records Information Mgmt Plan	Plan/Imp/Dir/Records Mgmt plan	1.25	-	1.25		281,237		4,329		285,566	la
54	27 616	III	IM	Records Services	Records/Documents processing	3.75	-	3.75		924,710		(86,413)		838,297	la,III,IV
55	04 630	III	FIN	Cash Mgmt/Revenue Receiving	Receive/Post Pymts/Reconcile	5.25	-	5.25		745,200		42,208		787,408	II,III,IV,XI
56	16 640	III	AHR	Risk Management	Liab/Property/Wk Comp/Selfins	1.00	1.25	2.25		303,791		228,130		531,921	la
57	27 735	III	IM	Systems Maintenance	Maintain Existing Software Prog	4.50	-	4.50		1,335,452		15,725		1,351,177	II,III,IV
58	27 736	III	IM	Systems Implementation/Peoples	Fin/HR PeopleSoft Systems Impl	1.50	-	1.50		275,084		255,195		530,279	la
59	04 805	III	FIN	Training	Continuing Education/Training	0.20	-	0.20		28,389		1,608		29,996	lb
60	26 805	III	PRA	Training	Training	0.05	0.20	0.25		8,437		34,586		43,023	lb
61	50 805	III	EP	Training	Dist/Org Unit Training	6.00	(2.90)	3.10		926,467		(398,971)		527,496	lb
62	60 805	III	CE	Training	Dist/Org Unit Training	-	4.00	4.00		-		592,203		592,203	lb
63	04 825	III	FIN	Union Negotiations	Official Labor/Mgmt Negotiate	0.02	-	0.02		2,839		161		3,000	la
64	08 825	III	LEG	Union Negotiations	Legal Adv: Union Negotiations	0.05	-	0.05		10,420		183		10,603	la
65	26 825	III	PRA	Union Negotiations	Official Labor/Mgmt Negotiate	0.01	0.01	0.02		1,687		1,754		3,442	la
66	35 825	III	LPA	Union Negotiations	Official Labor/Mgmt Negotiate	0.01	-	0.01		1,640		86		1,726	la
67	44 825	III	STA	Union Negotiations	Labor/Mgmt Negotiations	0.05	-	0.05		8,115		98		8,213	la
68	50 825	III	EP	Union Negotiations	Official Labor/Mgmt Negotiate	0.10	(0.05)	0.05		15,441		(6,933)		8,508	la
69	60 825	III	CE	Union Negotiations	Official Labor/Mgmt Negotiate	-	0.10	0.10		-		14,805		14,805	la
70	04 826	III	FIN	Union Steward Activities	Rep Employees in Grievance Act	0.01	-	0.01		1,419		80		1,500	la
71	08 826	III	LEG	Union Steward Activities	Rep Employees in Grievance Act	0.05	-	0.05		10,420		183		10,603	la
72	26 826	III	PRA	Union Steward Activities	Rep Employees in Grievance Act	0.01	0.01	0.02		1,687		1,754		3,442	la
73	35 826	III	LPA	Union Steward Activities	Union Steward Activities	0.01	-	0.01		1,640		86		1,726	la
74	44 826	III	STA	Union Steward Activities	Rep Employees in Grievance Act	0.05	-	0.05		8,115		98		8,213	la
75	50 826	III	EP	Union Steward Activities	Rep Employees in Grievance Act	0.10	(0.05)	0.05		15,441		(6,933)		8,508	la
76	60 826	III	CE	Union Steward Activities	Rep Employees in Grievance Act	-	0.10	0.10		-		14,805		14,805	la
77	03 855	II	EO	Web Tasks	Create/edit/review web content	0.03	-	0.03		7,471		2,211		9,682	la
78	04 855	II	FIN	Web Tasks	Create/edit/review web content	0.02	-	0.02		2,839		161		3,000	la
79	17 855	II	CB	Web Tasks	Create/edit/review web content	0.03	-	0.03		6,028		687		6,715	la
80	20 855	II	MO	Web Tasks	Create/edit/review web content	-	-	-		234,467		(234,467)		-	la
81	26 855	II	PRA	Web Tasks	Create/edit/review web content	0.10	0.40	0.50		16,874		69,172		86,046	la
82	27 855	II	IM	Web Tasks	Create/edit/review web content	3.25	-	3.25		881,815		11,256		893,071	la
83	35 855	II	LPA	Web Tasks	Create/edit/review web content	1.44	(1.04)	0.40		65,593		3,456		69,050	la
84	50 855	II	EP	Web Tasks	Creation/Update of Web Content	0.50	(0.25)	0.25		77,206		(34,666)		42,540	la
85	60 855	II	CE	Web Tasks	Creation/Update of Web Content	-	0.50	0.50		-		74,025		74,025	la

<b>Total Operational Support</b>					125.70	0.68	126.38	\$	25,899,412	\$	848,092	\$	26,747,503
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**Timely Review of Permits  
Work Program by Category**

#	Program Code	Goal	Office	Program	Activities	FTEs		Expenditures			Revenue Categories
						FY 2016-17	+/-	FY 2017-18	+/-	FY 2017-18	
1	26 040	I	PRA	Admin/Office Mgmt/AQ Impl	Admin/Modeling/New Legis/Sr Sr	0.47	(0.47)	\$ -	\$ (79,307)	\$ -	lb
2	26 044	I	PRA	Admin/Office Mgmt/Permit & Fee	Admin: Resolve Perm/Fee Issues	0.10	(0.10)	-	(16,874)	-	lb
3	50 120	I	EP	Certification/Registration Pro	Certification/Registration Prog	-	2.00	2.00	340,320	340,320	III
4	50 253	I	EP	ERC Appl Processing	Process ERC Applications	3.50	-	3.50	540,439	55,121	III
5	50 367	I	EP	Hearing Board/Appeals	Appeals: Permits & Denials	0.50	(0.25)	0.25	77,206	(34,666)	III
6	26 461	I	PRA	Permit & CEQA Modeling Review	Review Model Permit/Risk Assmt	1.50	(0.20)	1.30	303,109	(29,390)	III
7	50 475	I	EP	NSR Implementation	Implement NSR/Allocate ERCs	2.50	-	2.50	386,028	39,372	II,III,V,XV
8	50 476	I	EP	NSR Data Clean Up	Edit/Update NSR Data	0.50	-	0.50	77,206	7,874	II
9	50 515	I	EP	Perm Proc/Non TV/Non RECLAIM	PP: Non TitIV/TitIII/RECLAIM	57.30	(5.55)	51.75	8,867,335	(35,556)	III,XV
10	08 516	I	LEG	Permit Processing/Legal	Legal Advice: Permit Processing	0.20	-	0.20	41,680	732	III
11	50 517	I	EP	Permit Services	Facility Data-Create/Edit	12.50	-	12.50	1,930,139	196,861	III,XV
12	50 518	I	EP	RECLAIM Non-Title V	Process RECLAIM Only Permits	4.50	-	4.50	694,850	70,870	III,IV,XV
13	50 519	I	EP	Perm Proc/Title III (Non TV)	Process Title III Permits	1.00	-	1.00	154,411	15,749	III
14	50 521	I	EP	Perm Proc/Expedited Permit	Proc Expedited Permits (301OT)	0.50	3.50	4.00	77,206	603,434	III
15	27 523	III	IM	Permit Streamlining	Permit Streamlining	0.25	-	0.25	45,847	866	III
16	50 523	I	EP	Permit Streamlining	Permit Streamlining	3.75	-	3.75	579,042	59,058	III
17	44 545	I	STA	Protocols/Reports/Plans	Eval Test Protocols/Cust Svc	0.10	-	0.10	16,231	196	III,IV
18	44 546	I	STA	Protocols/Reports/Plans	Eval Test Protocols/Compliance	6.15	-	6.15	998,204	12,048	IV,VI
19	50 607	I	EP	RECLAIM & Title V	Process RECLAIM & TV Permits	12.40	6.00	18.40	1,914,697	1,236,246	III
20	26 643	I	PRA	Rule 222 Filing Program	Rule 222 Filing Program	-	-	-	50,000	-	IV
21	50 643	I	EP	Rule 222 Filing Program	Rule 222 Filing Program	-	0.50	0.50	-	85,080	IV
22	35 680	I	LPA	Small Business/Permit Streamln	Asst sm bus to comply/SCAQMD req	3.95	-	3.95	647,735	34,130	II,III,IV,V,XV
23	44 725	I	STA	Permit Processing/Support E&C	Assist EAC w/ Permit Process	0.05	-	0.05	8,115	98	III
24	50 728	I	EP	Perm Proc/IMI Programming	Assist IM: Design/Review/Test	2.00	0.55	2.55	308,822	125,086	II,III,IV
25	08 770	I	LEG	Title V	Leg Advice: Title V Prog/Perm Dev	0.05	-	0.05	10,420	183	II,IV
26	27 770	I	IM	Title V	Dev/Maintain Title V Program	1.00	0.50	1.50	183,389	211,890	III
27	08 772	I	LEG	Title V Permits	Leg Advice: New Source Title V Permit	0.05	-	0.05	10,420	183	III
28	50 774	I	EP	TV/Non-RECLAIM	Process Title V Only Permits	18.00	-	18.00	2,779,400	283,480	III
29	50 775	I	EP	Title V - Admin	Title V Administration	1.00	-	1.00	154,411	15,749	III
<b>Total Timely Review of Permits</b>						133.82	6.48	140.30	\$ 20,952,521	\$ 3,198,834	\$ 24,151,356

Policy Support Work Program by Category																		
#	Program Code	Goal	Office	Program	Activities	FTEs		Expenditures			Revenue Categories							
						FY 2016-17	+/-	FY 2017-18	FY 2016-17	+/-		FY 2017-18						
1	44	041	I	STA	Admin/Office Mgmt/Policy Supp	Overall Policy Supp/Mgmt/Coord	0.49	-	0.49	\$ 79,532	\$ 960	\$ 80,492	lb					
2	26	048	I	PRA	Admin/Prog Mgmt/Policy	Admin: GB/Committee Support	1.25	(1.25)	-	210,924	(210,924)	-	lb					
3	03	078	II	EO	Asthma & Outdoor AQ Consortium	Asthma & Outdoor AQ Consortium	0.01	(0.01)	-	2,490	(2,490)	-	la					
4	03	083	II	EO	Brain Tumor & Air Poll Foundat	Brain Tumor & Air Poll Foundation Support	0.03	(0.02)	0.01	7,471	(4,244)	3,227	la					
5	04	083	II	FIN	Brain Tumor & Air Poll Foundat	Brain Tumor & Air Poll Foundation Support	0.02	-	0.02	2,839	161	3,000	la					
6	26	083	II	PRA	Brain Tumor & Air Poll Fdn	Brain Tumor & Air Poll Foundation Support	0.10	-	0.10	16,874	335	17,209	la,II,IV					
7	26	148	I	PRA	Climate Change	GHG/Climate Change Policy Development	2.10	1.00	3.10	379,352	154,131	533,483	IV,XVII					
8	50	148	I	EP	Climate Change	GHG/Climate Change Support	0.50	-	0.50	77,206	7,874	85,080	II,IX					
9	60	148	I	CE	Climate Change	GHG/Climate Chg Support	-	0.10	0.10	-	14,805	14,805	IV,IX					
10	26	240	I	PRA	El-AQ Guidance Document	AQ Guidance Document	0.40	(0.35)	0.05	67,496	(58,891)	8,605	II,IX					
11	03	275	I	EO	Governing Board	Board/Committee Support	1.60	0.12	1.72	398,441	156,638	555,079	la					
12	03	276	III	EO	Advisory Group/Governing Board	Governing Board Advisory Group	0.05	(0.05)	-	12,451	(12,451)	-	la					
13	26	276	I	PRA	Advisory Group/Home Rule	Governing Board Advisory Group	0.30	-	0.30	50,622	1,006	51,627	la					
14	44	276	I	STA	Advisory Group/Technology Adva	Tech Adv Advisory Group Supp	0.10	-	0.10	16,231	196	16,427	VIII					
15	50	276	I	EP	Board Committees	Admin/Stationary Source Committees	0.25	-	0.25	38,603	3,937	42,540	la					
16	60	276	I	CE	Board Committees	Admin/Stationary Source Committee	-	0.15	0.15	-	22,208	22,208	la					
17	26	277	I	PRA	Advisory Group/AQMP	Governing Board AQMP Advisory Group	0.05	-	0.05	8,437	168	8,605	II,IX					
18	26	278	I	PRA	Advisory Group/Sci, Tech, Model	Scientific/Tech/Model Peer Rev	1.15	(1.00)	0.15	194,050	(168,236)	25,814	II,IX					
19	35	280	I	LPA	Advisory Group/Ethnic Comm	GB Ethnic Comm Advisory Group	0.40	-	0.40	65,593	3,456	69,050	II,IX					
20	35	281	I	LPA	Advisory Group/Small Business	SBA Advisory Group Staff Support	0.50	-	0.50	81,992	4,320	86,312	IV,IX					
21	35	283	I	LPA	Governing Board Policy	Brd sup/Respond to GB req	0.55	-	0.55	90,191	4,752	94,943	la					
22	35	345	II	LPA	Goods Mvmt&Financial Incentive	Goods Movement & Financial Incentives Progr	1.00	-	1.00	163,984	8,640	172,624	IX					
23	03	381	I	EO	Interagency Liaison	Local/State/Fed Coord/Interact	0.40	0.31	0.71	99,610	129,521	229,132	la,IX					
24	03	410	I	EO	Legislation	Testimony/Mtgs:New/Current Leg	0.50	(0.47)	0.03	124,513	(114,831)	9,682	la,IX					
25	44	410	I	STA	Legislation	Support Pollution Reduction thru Legislatio	0.50	-	0.50	81,155	980	82,134	IX					
26	35	412	I	LPA	Legislation/Federal	Lobbying/Analyses/Tracking/Out	0.25	-	0.25	706,126	2,160	708,286	la					
27	35	413	I	LPA	Legislation/Exec Office Support	Coord Legis w/ EO, EC, Mgmt	0.25	-	0.25	40,996	2,160	43,156	la					
28	35	414	I	LPA	Legislation-Effects	Lobbying/Analyses/Tracking/Out	0.80	-	0.80	141,187	6,912	148,099	la,IX					
29	03	416	I	EO	Legislative Activities	Supp/Promote/Influence Legis/Adm	0.05	(0.02)	0.03	12,451	(2,770)	9,682	la					
30	08	416	I	LEG	Legislative Activities	Lobbying: Supp/Promote/Influence legis/Adm	0.10	-	0.10	20,840	366	21,206	la					
31	26	416	I	PRA	Legislative Activities	Supp/Promote/Influence Legis/Adm	0.10	0.40	0.50	16,874	69,172	86,046	la					
32	35	416	I	LPA	Legislative Activities	Supp/Promote/Influence Legis/Adm	0.50	-	0.50	446,992	4,320	451,312	la					
33	50	416	I	EP	Legislative Activities	Legislative Activities	0.25	-	0.25	38,603	3,937	42,540	la					
34	60	416	I	CE	Legislative Activities	Legislative Activities	-	0.05	0.05	-	7,403	7,403	la					
35	26	454	I	PRA	Mob Src:Greenhs Gas Reduc Meas	Provide comments on mob src portion of AB32	-	0.89	0.89	-	153,161	153,161	XVII					
36	44	454	I	STA	Mob Src:Greenhs Gas Reduc Meas	Provide comments on mob src portion of AB32	0.89	(0.89)	-	144,456	(144,456)	-	XVII					
37	20	494	II	MO	Outreach/Media	Edits,Brds,Talk shows,Commercl	-	-	-	659,509	(659,509)	-	la,IX					
38	35	494	I	LPA	Outreach/Collateral Developmen	Edits,Brds,Talk shows,Commercl	4.56	1.04	5.60	185,506	945,904	1,131,410	la					
39	03	717	III	EO	Student Interns	Gov Board/Student Intern Program	0.02	(0.02)	-	4,981	(4,981)	-	la					
40	08	717	II	LEG	Student Interns	Gov Board/Student Intern Program	0.20	(0.10)	0.10	41,680	(20,474)	21,206	la					
41	16	717	II	AHR	Student Interns	Gov Board/Student Intern Program	0.20	-	0.20	36,358	968	37,326	la					
42	26	717	II	PRA	Student Interns	Gov Bd/Student Intern Program	0.01	0.24	0.25	1,687	41,335	43,023	la					
43	35	717	II	LPA	Student Interns	Student Interns	0.10	-	0.10	16,398	864	17,262	la					
44	60	717	II	CE	Student Interns	Gov Board/Student Intern Program	-	0.05	0.05	-	7,403	7,403	la					
Total Policy Support													20.53	0.17	20.70	\$ 4,784,698	\$ 355,898	\$ 5,140,597
Total SCAQMD													813.00	12.25	825.25	\$ 141,527,695	\$ 8,351,211	\$ 149,878,906

A prorated share of the District General Budget has been allocated to each line in the work program based on the number of FTEs reflected on the line.

## WORK PROGRAM GLOSSARY

**Below are descriptions of the activities related to the Work Program.**

**AB 1318 Mitigation** - an eligible electrical generating facility shall pay mitigation fees for the transfer of emission credits from SCAQMD's internal emission credit accounts. Mitigation fees shall be used to finance emission reduction projects, pursuant to the requirements of AB 1318.

**AB 2766** (Mobile Sources, MSRC) - programs funded from motor vehicle registration revenues. The activities include: evaluation, monitoring, technical assistance, and tracking of AB2766 Subvention Fund Program progress reports including cost-effectiveness and emissions reductions achieved; supporting programs implemented by the Mobile Source Review Committee (MSRC); disbursing and accounting for revenues subvended to local governments; and performing SCAQMD activities related to reduction of emissions from mobile sources.

**Acid Rain Program** - developing and implementing the Continuous Emissions Monitoring (CEMS) Program in compliance with 40 CFR Part 75 of the Clean Air Act.

**Administration/SCAQMD** - supporting the administration of the SCAQMD. Examples are tracking fixed assets, operating the mailroom, preparing and reviewing contracts, conducting oversight of SCAQMD activities, developing District-wide policies and procedures, preparing the SCAQMD budget, providing legal advice on SCAQMD programs and other activities, and performing activities in support of the SCAQMD as a whole.

**Admin/SCAQMD Capital Assets (Asset Management)** – tracking of acquisitions, disposals/retirements and reconciliation of capital assets to the Capital Outlay account, and conducting annual lab and biennial asset inventories.

**Administration/Office Management** - supporting the administration of an organizational unit or a unit within an Office. This includes such items as preparing Office budgets, tracking programs, providing overall direction and coordination of the office, providing program management and integration, preparing policies and procedures manuals, and preparing special studies and projects.

**Advisory Group** – providing support to various groups such as: AQMP (Air Quality Management Plan), Environmental Justice, Home Rule, Local Government and Small Business Assistance, Technology Advancement, and Permit Streamlining Task Force.

**AER (Air Emission Reporting) Program Public Assistance** – providing public assistance in implementing SCAQMD's AER program by conducting workshops, resolving fee-related issues, and responding to questions.

**Air Filtration** - installation of high-efficiency air filtration devices in schools with the goal of reducing children's exposure to particulate matter in the classroom.

## WORK PROGRAM GLOSSARY

**Air Monitoring** (Ambient Air Analysis, Ambient Network, Audit, Data Reporting, Special Monitoring) - monitoring the ambient air in the SCAQMD's jurisdiction. This includes operating the SCAQMD's air monitoring network and localized monitoring at landfill sites as well as conducting specialized monitoring in response to public nuisance situations. Also see Special Monitoring.

**Air Quality Evaluation** - analyzing air quality trends and preparing the Reasonable Further Progress (RFP) report.

**Ambient Air Analysis/Ambient Network** (Audit, Data Reporting, Special Monitoring) – complying with Federal regulations to monitor air quality for criteria pollutants at air monitoring stations to determine progress toward meeting the federal ambient air quality standards. This includes operating the SCAQMD's air monitoring network and localized monitoring at landfill sites as well as conducting specialized monitoring in response to public nuisance situations. SCAQMD monitoring stations also collect samples which are analyzed by SCAQMD's laboratory. Also see Special Monitoring.

**Ambient Lead Monitoring** – maintain the current ambient lead monitoring network to meet federal monitoring requirements.

**Annual Emission Reporting (AER)** – implementing the AER Program and tracking actual emissions reported by facilities, conducting audits of data, handling refunds, and preparing inventories and various reports.

**AQIP Evaluation** – provides incentive funding for projects to meet VOC, NO<sub>x</sub>, and CO emission targets with funds generated from companies who pay fees in lieu of carpool programs. Projects are funded through a semi-annual solicitation process.

**AQMP** (Air Quality Management Plan) – Management Plan for the South Coast Air Basin and the Interagency AQMP Implementation Committee.

**Air Quality Sensor Performance Evaluation Center (AQ-SPEC)** - program to test commercially available, low-cost air quality sensors.

**Architectural Coatings** (Admin, End User, Other) – Rule 314 requires architectural coatings manufacturers which distribute or sell their manufactured architectural coatings into or within the SCAQMD for use in the SCAQMD to submit an Annual Quantity and Emissions Report. To recover the cost of the program, a fee is assessed to these manufacturers. The fee is based on the quantity of coatings as well as the cumulative emissions from the quantity of coatings distributed or sold for use in the SCAQMD.

**Area Sources/Compliance** – developing rules and compliance programs, as well as alternatives to traditional permitting for smaller sources of emissions of VOC and NO<sub>x</sub>.

## WORK PROGRAM GLOSSARY

**Asthma and Outdoor Air Quality Consortium** – a group composed of researchers from local universities with air pollution and respiratory disease expertise that conducts research projects relating to asthma and air quality.

**Auto Services** - maintaining the SCAQMD's fleet of automobiles, trucks, and vans as well as providing messenger services as needed.

**Billing Services** - administering the SCAQMD's permit billing system, responding to inquiries, and resolving issues related to fees billed.

**Black Carbon Study** – analyzing black carbon emissions in the Basin to determine climate implications that may be used within the AB 32 climate programs and in other air districts.

**Board Committees** - participation in Governing Board committees by preparing materials, presenting information on significant or new programs and providing technical expertise.

**Brain & Lung Tumor & Air Pollution Foundation** – foundation established to support research on the relationship between air pollution and brain tumors. The demographic, behavioral, and genetic factors in patients with brain tumors in the Los Angeles area are being studied to determine any potential impact that air pollution may have on brain tumor incidence.

**Building Corporation** - managing the South Coast Air Quality Management District Building Corporation. The Building Corporation issued Installment Sale Revenue Bonds in conjunction with the construction of the SCAQMD's Diamond Bar headquarters facility.

**Building Maintenance** - maintaining and repairing the Diamond Bar Headquarters facility and SCAQMD air monitoring sites.

**Business Services** – overseeing operation of Facilities Services, Automotive Services, Print Shop and Mail/Subscriptions Services; negotiating and administering Diamond Bar facility, Long Beach Office, and air monitoring station lease agreements.

**California Natural Gas Vehicle Partnership** – strategic, non-binding partnership formed to work together in developing and deploying natural gas vehicles and implementing a statewide natural gas infrastructure.

**Call Center** (Central Operator, CUT-SMOG, Field Support) - operating the 24-hour radio communication system via telephone between SCAQMD headquarters and the public.

## WORK PROGRAM GLOSSARY

**CARB PERP (Portable Equipment Registration Program)** – a program established by CARB allowing the operation of portable equipment in any air district throughout the state without individual local district permits. Amended to enhance enforceability and expand CARB's requirements for portable engines and equipment units, creating a more comprehensive and inclusive statewide registration program that now provides for triennial inspection and renewal of PERP registration.

**Carl Moyer Program** – provides incentive funding for the repower, replacement, or purchase of new heavy-duty vehicles and equipment beyond the emission limits mandated by regulations. Awards are granted through an annual solicitation process. Separate program announcements are also issued for pre-1990 diesel Class 7 or 8 truck fleet and ports truck fleet modernization programs. Also see Mobile Sources.

**Case Disposition** - resolving Notices of Violation (NOV) issued by SCAQMD inspectors. This includes preparing both civil and criminal cases and administering SCAQMD's Mutual Settlement Letter Program.

**Cash Management** (Revenue Receiving, Refunds) – receiving revenue, posting of payments, processing of refunds associated with SCAQMD programs, and bank and cash reconciliations.

**CEMS Certification** (Continuous Emissions Monitoring System) - evaluating, approving, and certifying the continuous emissions monitoring systems installed on emissions sources to ensure compliance with SCAQMD rules and permit conditions.

**CEQA Document Projects/Special Projects** (California Environmental Quality Act) - reviewing, preparing, assessing, and commenting on projects which have potential air quality impacts.

**Certification/Registration Program** – manufacturers can voluntarily apply to have standard, off-the-shelf equipment certified by SCAQMD to ensure that it meets all applicable requirements.

**Classification and Pay** – maintaining the classification plan and conducting job analyses to ensure SCAQMD positions are allocated to the proper class, and conducting compensation studies to ensure classes are appropriately compensated and salaries remain competitive in the workforce.

**Clean Air Connections** – increase awareness of air quality issues and SCAQMD's programs and goals by developing and nurturing a region-wide group of community members with an interest in air quality issues.

**Clean Communities Plan (CCP)** – an update to the 2000 Air Toxics Control Plan (ATCP) and the 2004 Addendum. The objective of the 2010 CCP is to reduce the exposure to air toxics and air-related nuisances throughout the district, with emphasis on cumulative impacts.

## WORK PROGRAM GLOSSARY

**Clean Fuels Program** (Contract Admin, Legal Advice, Mobile Sources, Stationary Combust/Energy, Tech Transfer) – accelerate the development and deployment of advanced, low emission technologies, including, but not limited to electric, hydrogen, and plug-in hybrid electric vehicles, low emission heavy-duty engines, after treatment for off-road construction equipment and identification of tailpipe emissions from biofuels.

**Climate Change** – developing and evaluating policy and strategy related to local, state, federal and international efforts on climate change. Seek to maximize synergies for criteria and toxic reduction and minimize and negative impacts.

**Compliance** (Guidelines, Testing, IM Related Activities, NOV Admin, Special Projects) – ensuring compliance of clean air rules and regulations through regular inspection of equipment and facilities, as well as responding to air quality complaints made by the general public.

**Compliance/Notice of Violation (NOV) Administration** – NOV processing and review for preparation for assignment to Mutual Settlement Agreement (MSA), civil, or criminal handling.

**Computer Operations** - operating and managing the SCAQMD's computer resources. These resources support the SCAQMD's business processes, air quality data, and modeling activities and the air monitoring telemetry system. Also see Systems Maintenance.

**Conformity** - reviewing of federal guidance and providing input on conformity analysis for the Regional Transportation Improvement Program (RTIP). Staff also participates in various Southern California Association of Governments (SCAG) meetings, the Statewide Conformity Working group, and other meetings to address conformity implementation issues. Staff participates in the federal Conformity Rule revision process, and monitors and updates Rule 1902, Transportation Conformity, as needed.

**Credit Generation Programs** (Intercredit Trading) – rulemaking and developing and implementing a program that expands emission credit trading by linking the SCAQMD's stationary and mobile source credit markets.

**Criteria Pollutants/Mobile Sources** – coordinating the implementation of the AQMP and conducting feasibility studies for mobile source categories; developing control measures and amended rules as warranted.

**1-800-CUT-SMOG** - See Call Center.

**Database Information Support** – day-to-day supporting of ad hoc reports and bulk data updates required from SCAQMD's enterprise databases.

**Database Management** - developing and supporting the data architecture framework, data modeling, database services, and the ongoing administration of SCAQMD's central information repository.



## WORK PROGRAM GLOSSARY

**DB/Computerization** – developing laboratory instrument computer systems for data handling and control, evaluating the quality of the stored information, and further development and maintenance of the Source Test Information Management System (STIMS).

**DERA (Diesel Emission Reduction Act) School Bus Replacement** – an EPA funded project to replace diesel school buses with Compressed Natural Gas (CNG) and electric buses.

**DERA (Diesel Emission Reduction Act) FY 13 Vehicle Replacement** – an EPA funded project to replace on-road medium-duty diesel trucks with battery electric trucks.

**Economic Development/Business Retention** – meeting with various governmental agencies to assist company expansion or retention in the Basin.

**EJ-AQ Guidance Document** – providing outreach to local governments as they update their general plans and make land use decisions. Providing updates to the reference document titled “Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning.”

**Emergency Response** - responding to emergency air pollution (toxic) incidents, providing air quality monitoring support to local authorities.

**Emission Reduction Credit Application Processing** – processing applications for Emission Reduction Credits (ERC).

**Emissions Field Audit** – conducting field audits at facilities that have reported through Annual Emissions Reporting (AER) to ensure accurate emission reporting and to improve the program.

**Emissions Inventory Studies** – developing major point source emissions data and area source emissions inventory, updating emissions factors, developing and updating control factors, performing special studies to improve emission data, and responding to public inquiries regarding emission data.

**Employee Benefits** – administering SCAQMD’s benefit plans, including medical, dental, vision, and life insurance, as well as State Disability Insurance, Section 125 cafeteria plan, Long Term Care and Long Term Disability plans, Section 457 deferred compensation plan, and COBRA program.

**Employee Relations** – managing the collective bargaining process, administering MOU’s, preparing disciplinary documents, and administering SCAQMD’s performance appraisal program, Family and Medical Leave Act (FMLA) requests, tuition reimbursement, and outside training requests.

**Employee/Employment Law** – handling legal issues dealing with employment law in coordination with outside counsel.

## WORK PROGRAM GLOSSARY

**Enforcement Litigation** – staff attorneys pursue enforcement litigation including actions for civil penalties or injunctions when violations have not been settled or circumstances otherwise dictate.

**Environmental Education** - informing and educating the public about air pollution and their role in bringing clean air to the basin.

**Environmental Justice (EJ)** - a strategy for equitable environmental policymaking and enforcement to protect the health of all persons who live or work in the South Coast District from the health effects of air pollution regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location. The Environmental Justice Initiatives help to identify and address potential areas where citizens may be disproportionately impacted by air pollutants and ensure clean air benefits are afforded to all citizens and communities of the region.

**Equal Employment Opportunity** – ensuring non-discrimination and equal employment for employees and applicants through broad-based, targeted advertising; training interviewers to ensure fairness in evaluating candidates; ensuring that selection processes and testing instruments are appropriate and job-related; coaching supervisors and managers regarding hiring processes; and gathering data and preparing related staffing reports.

**Facilities Services** – monitoring service contracts, supporting tenants, overseeing conference center use, administering identification badges, building access control, and key/lock systems, and workspace planning.

**Fee Review** – activities relating to conducting Fee Review Committee hearings for businesses that contest SCAQMD fees (Rule 313).

**Financial Management** (Accounting, Financial Analyses, Treasury Management, Systems) - managing the financial aspects of the SCAQMD. This includes SCAQMD's cash management, investment, and accounting programs, and program and financial audits. It also includes maintaining SCAQMD's permit-related financial and accounting records as well as maintaining and enhancing SCAQMD's payroll and accounting systems.

**Goods Movement and Financial Incentives** – programs to evaluate the air quality issues associated with goods movement and traffic congestion, and for the identification of financial incentives for expedited facility modernization and diesel engine conversion.

**Governing Board** – supporting the operation of the Governing Board and advisory groups of the SCAQMD. These activities range from preparing the agenda and minutes to providing support services, legal advice, speeches, letters, and conference coordination.

**Grants Management** - coordinating, negotiating, monitoring, accounting, and reporting of the SCAQMD's air pollution program and financial activities relating to grants, including EPA, DOE, CEC, DHS grants, and CARB Subvention.

## WORK PROGRAM GLOSSARY

**Graphics Arts** - designing and producing presentation materials and SCAQMD publications.

**Green House Gas Reporting** - many of the businesses and facilities within SCAQMD's jurisdiction are required to report their GHG emissions to CARB under the regulation for Mandatory Reporting of Greenhouse Gases (state) and, beginning in 2011, to the U.S. EPA under their Mandatory Reporting Rule (federal).

**Green House Gas Reduction Fund** – CARB's Low Carbon Transportation Greenhouse Gas Reduction Fund (GGRF) Investment Program funds a project to demonstrate zero emission drayage trucks.

**Health Effects** – conducting research and analyzing the health effects of air pollutants and assessing the health implications of pollutant reduction strategies; working with industry, trade associations, environmental groups, CARB and EPA and providing information to concerned citizens.

**Hearing Board** (Variances, Abatement Orders, Appeals, Legal) – supporting operation of the SCAQMD's Hearing Board. These activities include accepting petitions filed; preparing and distributing notices; preparing minute orders, findings, and decisions of the Board; collecting fees; and general clerical support for the Board.

**Information Technology Services** - implementing new information technologies to enhance operational efficiency and productivity. Examples include developing workflow applications, training and supporting computer end users, and migrating network operating systems.

**Inspections** - inspecting facilities and equipment that emit or have the potential to emit air pollutants.

**Inspections/RECLAIM Audits** – conducting RECLAIM inspections and audits at facilities subject to Regulation XX (RECLAIM).

**Interagency Coordination/Liaison** - interacting with state, local, and federal control agencies and governmental entities.

**Intergovernmental/Geographic Deployment** - influencing local policy development and implementing a local government clean air program.

**Lawnmower Exchange** – residents of the South Coast Air Basin may trade in their gas-powered lawnmower and purchase a new zero-emission, battery electric lawnmower at a significant discount.

**Lead Agency Projects** – SCAQMD permitting and rule development projects where a CEQA document is prepared and the SCAQMD is the lead agency.

## WORK PROGRAM GLOSSARY

**Legal** (Advice, District Prosecutor Support, Representation, Legislation, Liability Defense) - providing legal support to SCAQMD in the areas of liability defense, writs of mandate, injunctions, and public hearings. This activity also includes reviewing contracts, and advising staff on rules, fees and other governmental issues.

**Legislation** (Annual Reports, State, Federal, Legislative Activity) - drafting new legislation, analyzing and tracking proposed legislation, and developing position recommendations on legislation which impacts air quality.

**Library** - acquiring and maintaining reference materials and documentation that support the SCAQMD's programs.

**Lobby Permit Services** – providing information and support to applicants to expedite permit processing. Includes consolidating forms, prescreening review for completeness of applications, providing internet access of certain forms, and providing “over-the-counter” permits in the lobby of the SCAQMD’s Diamond Bar headquarters.

**Meteorology** - modeling, characterizing, and analyzing both meteorological and air quality data to produce the SCAQMD's daily air quality forecast.

**Microscopical Analysis** - analyzing, identifying, and quantifying asbestos for compliance with SCAQMD, state, and federal regulations.

**Mobile Sources** (SCAQMD Rulemaking, Carl Moyer, CARB/EPA and CEC/US DOE monitoring, Emission Incentive Method, Greenhouse Gas Reduction Measures, Strategies (Off Road, Control, Accounting,) - transportation monitoring, strategies, control measures, demonstration projects, the Mobile Source Air Pollution Reduction Review Committee (MSRC), implementation of Fleet Rules, High Emitter Repair & Scrappage Program, and locomotive remote sensing.

**Mobile Source and AQMP (Air Quality Management Plan) Control Strategies** – provide technical assistance on the mobile source element of the AQMP.

**Moyer Program** – see Carl Moyer Program

**Mutual Settlement Program** - resolving civil penalties without court intervention; this program is a mechanism to resolve violations and avoid criminal proceedings.

**National Air Toxics Trends Stations (NATTS)** – through EPA funding, two sites in the monitoring network are utilized to collect ambient VOC and particulate samples. Samples are analyzed by the SCAQMD lab and reported to EPA where the data is used to determine toxic trends.

## WORK PROGRAM GLOSSARY

**Near Roadway (NO<sub>2</sub>) Monitoring** – federal monitoring requirement that calls for state and local air monitoring agencies to install near-road NO<sub>2</sub> monitoring stations at locations where peak hourly NO<sub>2</sub> concentrations are expected to occur within the near-road environment in larger urban areas.

**Network Operations/Telecommunications** – installing, maintaining, and providing operational support of the SCAQMD's PC, voice, data, image, and radio networks; planning, designing, and implementing new network systems or services in response to the SCAQMD's communications and business needs; and providing training, support, and application development services for end-users of voice and PC systems.

**New Systems Development** – providing support for major computer systems development efforts.

**New Source Review (NSR)** (Data Clean-up, Implementation, Modeling Permit Review, Rulemaking) - developing and implementing New Source Review rules; designing, implementing, and maintaining the Emission Reduction Credits and the New Source Review programs. These programs streamline the evaluation of permit renewal and emissions reporting.

**Outreach** (Business, Media, Visiting Dignitary) - increasing public awareness of the SCAQMD's programs, goals, permit requirements, and employment opportunities; interacting, providing technical assistance, and acting as liaison between SCAQMD staff and various sectors of the private industry, local governments, and small businesses.

**Outreach Media/Communications** - monitoring local and national press accounts, both print and broadcast media, to assess SCAQMD's outreach and public opinion on SCAQMD rules and activities. This also includes responding to media calls for informational background material on SCAQMD news stories.

**Payroll** - paying salaries and benefits to SCAQMD employees, withholding and remitting applicable taxes, and issuing W2s.

**Permit Processing NSR**, (RECLAIM, Non RECLAIM, Title V, Title III, Pre-Application, Services, Expedited, IM Processing, CEQA Modeling Review, Legal, Support EAC, Expired) - inspecting, evaluating, auditing, analyzing, reviewing and preparing final approval or denial to operate equipment which may emit or control air contaminants.

**Permit Streamlining** – activities relating to reducing organizational costs and streamlining regulatory and permit requirements on businesses.

## WORK PROGRAM GLOSSARY

**Photochemical Assessment Monitoring Systems (PAMS)** - promulgating PAMS (a federal regulation), which requires continuous ambient monitoring of speciated hydrocarbons during smog season. Through EPA funding, ozone precursors are measured at seven stations and samples are collected.

**PM Sampling Program (EPA)** – daily collection of particulate samples

**PM Monitoring/Strategies Programs** (PM<sub>2.5</sub>, PM<sub>10</sub>, PM<sub>10-2.5</sub>) – planning and developing rules related to PM<sub>2.5</sub>, PM<sub>10</sub>, and PM<sub>10-2.5</sub>. Obtaining measurements of particulates at air monitoring stations throughout the South Coast Air Basin (Basin). Measurements are made for Total Suspended Particulate lead, PM<sub>10</sub>, and PM<sub>2.5</sub> using federal reference methods (FRM) to determine compliance with state and federal air quality standards.

**Port Community Air Quality Enforcement/I-710 Monitoring** - inspecting and auditing marine vessels in the Rule 1631 pilot credit generation program. These oversight activities will help ensure the credit generation program produces real, quantified, and enforceable emissions reductions. Measurements including air toxics and criteria pollutants collected to determine impact of port activities on air quality near the ports and surrounding communities.

**Port of Long Beach (POLB) Advanced Maritime Emission Control System (AMECS) Demo** – funded by the Port of Long Beach, the proposed project will assess the performance and effectiveness of a barge-mounted emission control system to capture and treat hotelling emissions from ocean going vessels (OGV) at berth at the Port of Long Beach.

**Portable Equipment Registration Program (PERP)** – see CARB PERP Program.

**Position Control** – tracking Board-authorized positions and SCAQMD workforce utilization, processing personnel transactions for use by Payroll, and preparing reports regarding employee status, personnel transactions, and vacant positions.

**PR 2301 Indirect Source Rule (ISR) Implementation**– developing and implementing rules to mitigate emissions growth from new and redevelopment projects; the scope of the rule will include the reduction of emissions related to residential, commercial and industrial projects.

**Print Shop** – performing in-house printing jobs and contracting outside printing/binding services when necessary.

**Proposition 1B** - providing incentive funding for goods movement and lower emission school bus projects with funds approved by voters in November 2006.

**Protocols/Reports/Plans/LAP** - evaluating and approving protocols, source testing plans and reports submitted by regulated facilities as required by SCAQMD rules and permit conditions, New Source Review, state and federal regulations; and evaluating the capabilities of source test laboratories under the Laboratory Approval Program (LAP).

## WORK PROGRAM GLOSSARY

**Public Complaints/Breakdowns** - responding to air pollution complaints about odors, smoke, dust, paint overspray, or companies operating out of compliance; responding to industry notifications of equipment breakdowns, possibly resulting in emission exceedances.

**Public Education/Public Events** – implementing community events and programs to increase the public’s understanding of air pollution and their role in improving air quality.

**Public Information Center** - notifying schools and large employers of predicted and current air quality conditions on a daily basis and providing the public with printed SCAQMD information materials.

**Public Notification** – providing timely and adequate notification to the public of SCAQMD rulemaking workshops and public hearing, proposed rules, upcoming compliance dates, and projects of interest to the public.

**Public Records Act** - providing information to the public as requested and as required by Government Code, Section 6254.

**Purchasing** (Receiving, Stockroom) - procuring services and supplies necessary to carry out SCAQMD programs.

**Quality Assurance** – assuring the data quality from the Monitoring and Analysis Division meets or exceeds state and federal standards and also assuring the appropriateness of the data for supporting SCAQMD regulatory, scientific and administrative decisions.

**RECLAIM/Admin Support** – developing and implementing rules, and monitoring of emissions of the REgional CLean Air Incentives Market (RECLAIM) program, a market incentives trading program designed to help achieve federal and state ambient air quality standards in a cost-effective manner with minimal impacts to jobs or public health.

**RECLAIM and Title V** – permit processing of applications from facilities that are both RECLAIM and Title V.

**RECLAIM Non-Title V** – permit processing of applications from RECLAIM facilities only.

**Records Information Management Plan** – providing the process to comply with internal and external requirements for the retention and retrieval of information pertinent to the mission and operation of the SCAQMD.

**Records Services** – maintaining SCAQMD’s central records and files, converting paper files to images, and operating the network image management system; providing for all off-site long-term storage of records and for developing and monitoring the SCAQMD’s Records Retention Policy.

## WORK PROGRAM GLOSSARY

**Recruitment and Selection** – assisting SCAQMD management in meeting staffing needs by conducting fair and non-discriminatory recruitment and selection processes that result in qualified, diverse applicants for SCAQMD jobs; overseeing promotional and transfer processes, and reviewing proposed staff reassignments.

**Refinery Pilot Project** – pursuant to the AQMP, a working group was formed to examine the efficacy of an alternative regulatory approach to reducing refinery emissions beyond the current requirements by establishing a targeted emission reduction commitment for each refinery for a set period of time and allow the use of on-site or off-site reduction strategies with acceptable environmental justice attributes.

**Regional Modeling** – designing, performing, and reviewing modeling and risk assessment analysis to assess the air quality impacts of new or modified sources of air pollution. Also see Meteorology.

**Ridesharing** - implementing the SCAQMD's Rule 2202 Trip Reduction Plan.

**Risk Management** - developing and administering SCAQMD's liability, property, and workers' compensation and safety programs.

**Rule 1610** – ensuring compliance with Rule 1610, Old-Vehicle Scrapping.

**Rule 2202 ETC Training** – administering and conducting monthly Rule 2202 implementation training classes, workshops and/or forums for the regulated public and other interested individuals.

**Rule 222 Implement/Support/Filing Program** – ensuring compliance with Rule 222 for equipment subject to a filing requirement with the SCAQMD.

**Rulemaking/Rules** (NO<sub>x</sub>, BACT, SO<sub>x</sub>, VOC, Toxics, RECLAIM, Support PRA, Legal Advice) – developing new rules and evaluating existing SCAQMD and CARB rules and compliance information to assure timely implementation of the AQMP and its control measures.

**Salton Sea Monitoring** – maintaining the monitoring network for expected nuisance pollutants, primarily hydrogen sulfide, which are released from the Salton Sea area.

**School Bus Lower Emission Program** – funding to replace pre-1987 diesel school buses with new alternative fuel buses owned and operated by public school districts.

**SCAQMD Mail** – processing and delivering all incoming and outgoing mail.

**SCAQMD Projects** – SCAQMD permitting and rule development projects where a California Environmental Quality Act (CEQA) document is prepared and the SCAQMD is the lead agency.



## WORK PROGRAM GLOSSARY

**School Siting** – identifying any hazardous emission sources within one-quarter mile of a new school site as required by AB3205. District activities include reporting of criteria and toxic pollutant information and conducting inspections of permitted facilities within a quarter-mile radius of proposed schools.

**Small Business Assistance** (Financial, Legal, Permit Streamlining) - providing technical and financial assistance to facilitate the permit process for small businesses.

**Socio-Economic** - developing an economic database to forecast economic activity, analyzing economic benefits of air pollution control, and analyzing the social impact of economic activity resulting from air quality regulations and plans.

**Source Education** - providing classes to facility owners and operators to ensure compliance with applicable SCAQMD's rules and regulations.

**Source Testing (ST)** – conducting source tests as needed in support of permitting functions and to determine compliance with permit conditions and SCAQMD Rules. Additionally, data submitted by facilities is reviewed for protocol approval, CEMS certification, or test data acceptance.

**Speaker's Bureau** - training SCAQMD staff for advising local government and private industry on air quality issues.

**Special Monitoring** (Emergency, Rule 403) – performing special ambient air sampling at locations where public health, nuisance concern, or Rule 403 violations may exist; determining the impacts from sources emitting toxics on receptor areas; and performing special monitoring in support of the emergency response program and public complaints response. Also see Emergency Response.

**Sample Analyses** – analyzing samples submitted by inspectors to determine compliance with SCAQMD Rules. Samples are also analyzed in support of rule development activities.

**Student Interns** – providing mutually beneficial educational hands-on experience for high school and college students by providing them with the opportunity to engage in day-to-day work with mentoring professionals within SCAQMD.

**Subscription Services** - maintaining SCAQMD's rule subscription mailing list and coordinating the mailing of SCAQMD publications.

**Systems Implementation PeopleSoft** – implementing activities required to maintain an integrated Financial and Human Resources system, including additional features and functions introduced with scheduled software upgrades.

## WORK PROGRAM GLOSSARY

**Systems Maintenance** - routinely maintaining installed production data systems that support SCAQMD's business fluctuations, including minor modifications, special requests, fixes, and general maintenance.

**Targeted Air Shed** – funding from EPA to reduce air pollution in the nation's areas with the highest levels of ozone or particulate matter 2.5 (PM<sub>2.5</sub>) exposure.

**Technology Advancement** (Commercialization, non-Combustion) - supporting the development of innovative controls for mobile and stationary sources, reviewing promising control technologies, and identifying those most deserving of SCAQMD developmental support.

**Title III** (Inspections, Rulemaking) - permitting equipment that emits hazardous air pollutants in compliance with the federal Clean Air Act.

**Title V** (Compliance, Legal Advice, Inspections, NSR Permits, Rulemaking) - developing and implementing a permit program in compliance with the federal Clean Air Act.

**Toxic Inventory Development** – non-facility specific tasks performed by the AB 2588 team to include toxic inventory development, support for rule development, and responding to public records and other data requests.

**Toxics/AB 2588** – evaluation of toxic inventories, risk assessments and risk reduction plans, with public notification as required. Analyzing, evaluating, reviewing, and making recommendations regarding toxic substances and processes and contributing input to District toxic rules and programs.

**Training** (Education, Organizational and Human Resources Development, Staff) - providing increased training in the areas of personnel education, computers, safety procedures, new programs, hazardous materials, and new technologies.

**Transportation Regional Programs/Research** – actively participating in Advisory Groups and Policy Committees involving the development and monitoring of the District's AQMP, Congestion Mitigation Air Quality Improvement Program (CMAQ), Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), Transportation Control Measures (TCMs) and regional alternative commute mode programs.

**TraPac Air Filtration Program** – implementing/administering the installation and maintenance of air filtration systems at Wilmington area schools.

**Union Negotiations/Union Steward Activities** – Union-related activities of union stewards including labor management negotiations and assisting in the filing of employee grievances.

**VEE Trains** – conducting periodic visible emission evaluations (VEE) of trains to verify compliance with visible emission requirements.

## WORK PROGRAM GLOSSARY

**VOC Sample Analysis** (Compliance/Rules/SBA/Other) - providing data and technical input for VOC rule development, performing analytical testing for compliance with SCAQMD rules regulating VOC content in coatings, inks, plastic foam, paint, adhesives, and solvents, and providing assistance and technical input to small businesses and other regulatory agencies, industry and the public.

**Voucher Incentive Program (VIP)** - incentive program designed to reduce emissions by replacing old, high-polluting vehicles with newer, lower-emission vehicles, or by installing a Verified Diesel Emission Control Strategy (VDECS).

**Web Tasks** – preparing and reviewing materials for posting to SCAQMD's internet and/or intranet website.

## WORK PROGRAM ACRONYMS

### ORGANIZATIONAL UNITS

AHR	Administrative & Human Resources
CB	Clerk of the Boards
CE	Compliance & Enforcement
DG	District General
EP	Engineering & Permitting
EO	Executive Office
FIN	Finance
GB	Governing Board
IM	Information Management
LEG	Legal
LPAM	Legislative & Public Affairs/Media Office
PRA	Planning, Rule Development & Area Sources
STA	Science & Technology Advancement

### PROGRAMS

AB 1318	Offsets-Electrical Generating Facilities
AB 2588	Air Toxics ("Hot Spots")
AB 2766	Motor Vehicle Subvention Program
APEP	Annual Permit Emissions Program
AQIP	Air Quality Investment Program
AQMP	Air Quality Management Plan
BACT	Best Available Control Technology
CEMS	Continuous Emissions Monitoring Systems
CEQA	California Environmental Quality Act
CF	Clean Fuels Program
CMP	Carol Moyer Program
DERA	Diesel Emission Reduction Act
ERC	Emission Reduction Credit
GGRF	Greenhouse Gas Reduction Fund
MS	Mobile Sources Program
NSR	New Source Review
PERP	Portable Equipment Registration Program
PR	Public Records Act
QA	Quality Assurance
RFP	Reasonable Further Progress
RECLAIM	REgional CLean Air Incentives Market
ST	Source Test
Title III	Federally Mandated Toxics Program
Title V	Federally Mandated Permit Program
VIP	Voucher Incentive Program

### POLLUTANTS

CO	Carbon Monoxide
NO <sub>x</sub>	Oxides of Nitrogen
O <sub>3</sub>	Ozone
PM <sub>2.5</sub>	Particulate Matter <2.5 microns
PM <sub>10</sub>	Particulate Matter ≤ 10 microns
ROG	Reactive Organic Gases
SO <sub>x</sub>	Oxides of Sulfur
VOC	Volatile Organic Compound

### GOVERNMENT AGENCIES

APCD	Air Pollution Control District (Generic)
CARB	California Air Resources Board
CEC	California Energy Commission
DHS	Department of Homeland Security
DOE	Department of Energy
EPA	Environmental Protection Agency
NACAA	National Association of Clean Air Agencies
SCAG	Southern California Association of Governments

### GENERAL

AA	Affirmative Action
AER	Annual Emissions Reporting
AM	Air Monitoring
AQSCR	Air Quality Standards Compliance Report
AQ-SPEC	Air Quality Sensor Performance Evaluation Center
ATIP	Air Toxics Inventory Plan
AVR	Average Vehicle Ridership
CE-CERT	College of Engineering-Center for Environmental Research and Technology
CLASS	Clean Air Support System
CNG	Compressed Natural Gas
CTC	County Transportation Commission
CTG	Control Techniques Guideline
DB	Database
DPF	Diesel Particulate Filter
EIR	Environmental Impact Report
EJ	Environmental Justice
ETC	Employee Transportation Coordinator
EV	Electric Vehicle
FIP	Federal Implementation Plan
FY	Fiscal Year
GHG	Greenhouse Gas
HR	Human Resources
HRA	Health Risk Assessment
IAIC	Interagency AQMP Implementation Committee
IGA	Intergovernmental Affairs
ISR	Indirect Source Rules
LAER	Lowest Achievable Emissions Rate
LEV	Low Emission Vehicle
LNG	Liquefied Natural Gas
LS	Laboratory Services
MOU	Memorandum of Understanding
MPO	Metropolitan Planning Organization
MSERCs	Mobile Source Emission Reduction Credits
MSRC	Mobile Source (Air Pollution Reduction) Review Committee
NATTS	National Air Toxics Trends Stations
NESHAPS	National Emission Standards for Hazardous Air Pollutants
NGV	Natural Gas Vehicle
NOV	Notice of Violation
ODC	Ozone Depleter Compounds
PAMS	Photochemical Assessment Monitoring System
PAR	Proposed Amended Rule
PE	Program Evaluations
PR	Proposed Rule
RFP	Request for Proposal
RFQ	Request for Quotations
RTC	RECLAIM Trading Credit
SBA	Small Business Assistance
SIP	State Implementation Plan
SCR	Selective Catalytic Reduction
STE	Source Testing Evaluations
SULEV	Super Ultra Low-Emission Vehicle
TCM	Transportation Control Measure
ULEV	Ultra- Low-Emissions Vehicle
VEE	Visible Emissions Evaluations
VMT	Vehicle Miles Traveled
ZECT	Zero Emission Cargo Transport
ZEV	Zero-Emission Vehicle

# **ATTACHMENT C**

**SOUTH COAST**

**AIR QUALITY MANAGEMENT DISTRICT**

## ***SALARY RESOLUTION***

~~March 3, 2017~~

June 2, 2017

## ARTICLE 7

### DESIGNATED DEPUTY ANNUAL SALARIES

(Effective with the start of the pay period encompassing January 1, 2015)

Assistant Chief Deputy Counsel, Major Prosecutions	\$158,049
Assistant Deputy Executive Officer	\$155,669
Chief Deputy Counsel	\$178,398
Deputy Executive Officer, including Chief Financial Officer	\$166,615
Director of Strategic Initiatives	\$148,723
Health Effects Officer	\$148,723
Intergovernmental Affairs Officer	Vacant
Senior Policy Advisor	\$151,614

(Effective with the start of the pay period encompassing January 1, 2016)

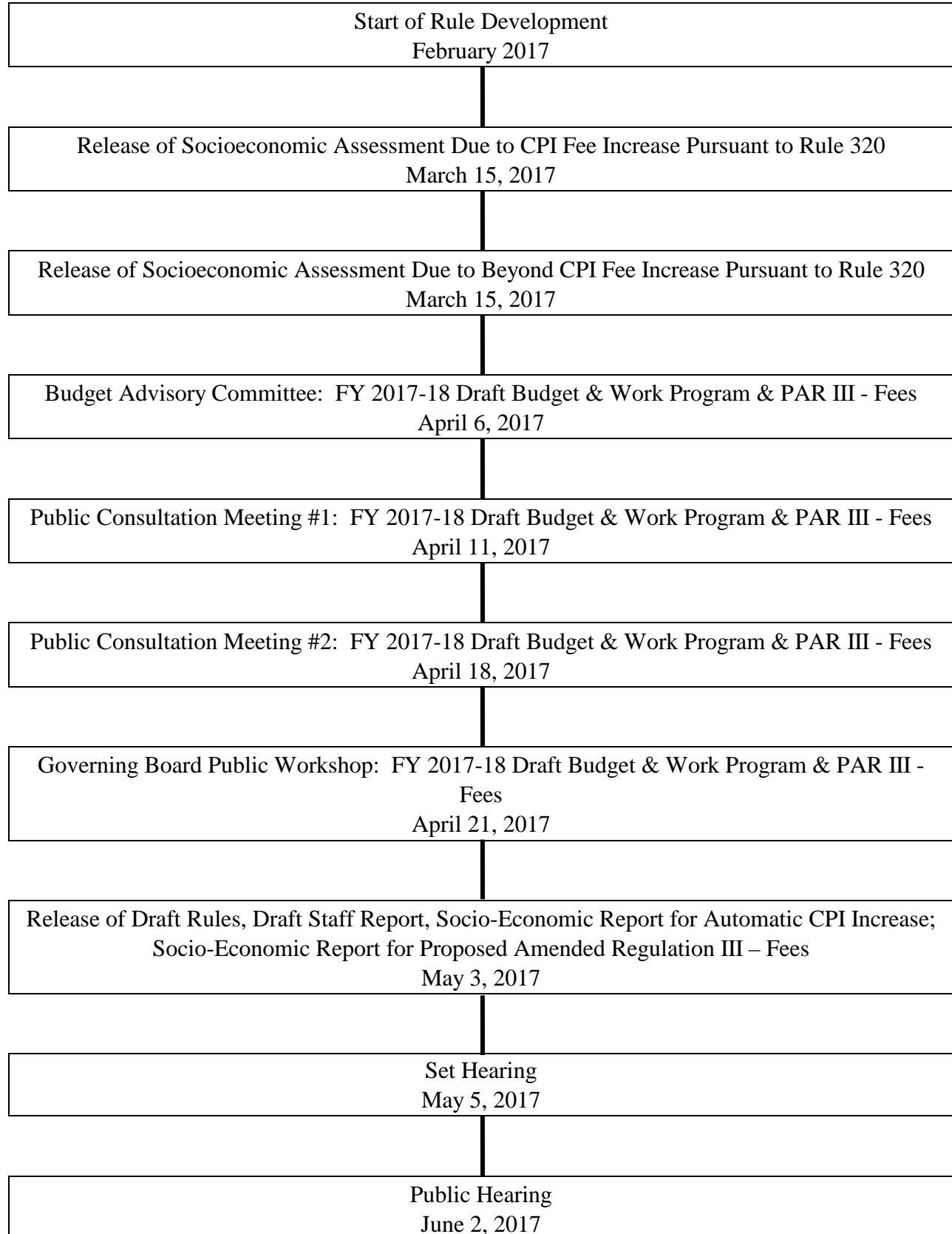
Assistant Chief Deputy Counsel, Major Prosecutions	\$160,420
Assistant Deputy Executive Officer	\$158,004
Chief Deputy Counsel	\$181,074
Deputy Executive Officer, including Chief Financial Officer	\$169,114
Director of Strategic Initiatives	\$150,954
Health Effects Officer	\$150,954
Intergovernmental Affairs Officer	Vacant
Senior Policy Advisor	\$153,888

(Effective with the start of the pay period encompassing January 1, 2017)

Assistant Chief Deputy Counsel, Major Prosecutions	\$162,826
Assistant Deputy Executive Officer	\$160,374
Chief Deputy Counsel	\$183,790
Deputy Executive Officer, including Chief Financial <u>Operating</u> Officer <u>and Chief Administrative Officer</u>	\$171,651
Director of Strategic Initiatives	\$153,218
Health Effects Officer	\$153,218
Intergovernmental Affairs Officer	Vacant
Senior Policy Advisor	\$156,196

# ATTACHMENT D

## PAR III - RULE DEVELOPMENT PROCESS



Time Spent in Rule Development: 4 months

# ATTACHMENT E

## KEY CONTACTS

Curtis Coleman	Southern California Air Quality Alliance
Bill LaMarr	California Small Business Alliance
Daniel McGivney	Southern California Gas Company
Bill Quinn	California Council for Environmental and Economic Balance
David Rothbart	Los Angeles County Sanitation Districts
Susan Stark	Tesoro
---	Tenax Dry Cleaners
Tom Williams	Sierra Club



## **ATTACHMENT F**

### **RESOLUTION NO. 17-\_\_\_\_\_**

**A Resolution of the South Coast Air Quality Management District (SCAQMD) Governing Board determining that the proposed amendments to Regulation III – Fees, including Rules 301 – Permitting and Associated Fees, 303 – Hearing Board Fees, 304 – Equipment, Materials, and Ambient Air Analyses, 304.1 – Analyses Fees, 306 – Plan Fees, 307.1 – Alternative Fees for Air Toxics Emissions Inventory, 308 – On-Road Motor Vehicle Mitigation Options Fees, 309 – Fees for Regulation XVI and Regulation XXV, 311 – Air Quality Investment Program (AQIP) Fees, 313 – Authority to Adjust Fees and Due Dates, 314 – Fees for Architectural Coatings, and 315 – Fees for Training Classes and License Renewal, are exempt from the requirements of the California Environmental Quality Act (CEQA).**

**A Resolution of the SCAQMD Governing Board amending Regulation III – Fees, including Rules 301 – Permitting and Associated Fees, 303 – Hearing Board Fees, 304 – Equipment, Materials, and Ambient Air Analyses, 304.1 – Analyses Fees, 306 – Plan Fees, 307.1 – Alternative Fees for Air Toxics Emissions Inventory, 308 – On-Road Motor Vehicle Mitigation Options Fees, 309 – Fees for Regulation XVI and Regulation XXV, 311 – Air Quality Investment Program (AQIP) Fees, 313 – Authority to Adjust Fees and Due Dates, 314 – Fees for Architectural Coatings, and 315 – Fees for Training Classes and License Renewal.**

**WHEREAS**, the SCAQMD has had its regulatory program certified pursuant to Public Resources Code § 21080.5 and has conducted a CEQA review and analysis of the proposed amendments to Regulation III, including Rules 301, 303, 304, 304.1, 306, 307.1, 308, 309, 311, 313, 314, and 315, pursuant to such program (SCAQMD Rule 110); and

**WHEREAS**, the SCAQMD Governing Board finds and determines that the proposed amendments to Regulation III, including Rules 301, 303, 304, 304.1, 306, 307.1, 308, 309, 311, 313, 314, and 315, are considered a "project" pursuant to CEQA per CEQA Guidelines § 15002(k) – General Concepts, the three-step process for deciding which document to prepare for a project subject to CEQA; and

**WHEREAS**, the SCAQMD Governing Board finds and determines that after conducting a review of the proposed project in accordance with CEQA Guidelines § 15061 – Review for Exemption, procedures for determining if a project is exempt from CEQA, the proposed amendments to Regulation III, including Rules 301, 303, 304, 304.1, 306, 307.1, 308, 309, 311, 313, 314, and 315, are determined to be exempt from CEQA; and

**WHEREAS**, the SCAQMD Governing Board finds and determines that it can be seen with certainty that there is no possibility that the proposed amendments to Rules 301, 306, 308 and 314, which are identified as being strictly administrative in nature, may have any significant effects on the environment, and are therefore, exempt from CEQA pursuant to CEQA Guidelines § 15061(b)(3) – Activities Covered By General Rule; and

**WHEREAS**, the SCAQMD Governing Board finds and determines that the proposed amendments to Rules 301, 303, 304, 304.1, 306, 307.1, 308, 309, 311, 313, 314, and 315 reflect increases in fees, and the administrative amendments to Rules 301, 306, 308, and 314 also involve fees charged by the District, such that all of the amendments are statutorily exempt from CEQA requirements pursuant to CEQA Guidelines § 15273 – Rates, Tolls, Fares, and Charges, because the proposed amendments involve charges by a public agency for the purpose of meeting operating expenses, purchasing supplies, equipment and materials, and meeting financial reserve requirements, all as specified in the Salary and Benefits, Services and Supplies, and Capital Outlays set forth in the Proposed Budget for FY 2017-2018 and the budget forecast for FY 2018-2019; and

**WHEREAS**, SCAQMD staff has prepared a Notice of Exemption for the proposed project, that is completed in compliance with CEQA Guidelines § 15062 – Notice of Exemption; and

**WHEREAS**, the Notice of Exemption, the June 2, 2017 SCAQMD Governing Board letter, and other supporting documentation were presented to the SCAQMD Governing Board and the SCAQMD Governing Board has reviewed and considered the entirety of this information prior to approving the project; and

**WHEREAS**, the SCAQMD Governing Board obtains its authority to adopt, amend, or repeal rules and regulations from Sections 40000, 40001, 40440, 40500, 40500.1, 40506, 40510, 40510.5, 40512, 40522, 40522.5, 40523, 40702, 40725 through 40728, 41512, and 44380 of the California Health and Safety Code; and

**WHEREAS**, the SCAQMD Governing Board has determined that a need exists to amend Regulation III – Fees, including Rules 301, 303, 304, 304.1, 306, 307.1, 308, 309, 311, 313, 314, and 315 to fund the Fiscal Year (FY) 2017-2018 and FY 2018-2019 budgets; and

**WHEREAS**, the SCAQMD Governing Board has determined that Regulation III – Fees, including Rules 301, 303, 304, 304.1, 306, 307.1, 308, 309, 311, 313, 314, and 315 as proposed to be amended, are written or displayed so that their meaning can be easily understood by the persons directly affected by them; and

**WHEREAS**, the SCAQMD Governing Board has determined that Regulation III – Fees, including Rules 301, 303, 304, 304.1, 306, 307.1, 308, 309, 311, 313, 314, and 315 as proposed to be amended, are in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, or state or federal regulations; and

**WHEREAS**, a public hearing has been properly noticed in accordance with the provisions of Health and Safety Code Section 40725; and

**WHEREAS**, the SCAQMD Governing Board has held a public hearing in accordance with all provisions of law; and

**WHEREAS**, the SCAQMD Governing Board, in amending these rules, references the following statutes which the SCAQMD hereby implements, interprets, or makes specific: Health and Safety Code Sections 40500, 40500.1, 40506, 40510, 40510.5, 40512, 40522, 40522.5 40523, 41512, and 44380; and

**WHEREAS**, the SCAQMD Governing Board has determined that Health and Safety Code Section 40920.6 is not applicable to Regulation III – Fees, Rules 301, 303, 304, 304.1, 306, 307.1, 308, 309, 311, 313, 314, and 315 as proposed to be amended, since the rules in Regulation III - Fees are not Best Available Retrofit Control Technology rules and do not regulate air contaminants; and

**WHEREAS**, the SCAQMD Governing Board has determined that Regulation III – Fees, including Rules 301, 303, 304, 304.1, 306, 307.1, 308, 309, 311, 313, 314, and 315 as proposed to be amended, do not impose the same requirements as any existing state or federal regulation and are necessary and proper to execute the power and duties granted to, and imposed upon, the District; and

**WHEREAS**, the SCAQMD Governing Board has determined that the proposed amendments to Rules 301, 303, 304, 304.1, 306, 307.1, 308, 309, 311, 313, 314, and 315 for recovering specific program costs are necessary to better recover the costs of these specific programs for the SCAQMD Proposed Budget for FY 2017-2018 and budget forecast for FY 2018-2019\_in that the proposed fee increases will ultimately recover the full cost of programs related to Title V sources, as required by the Clean Air Act, and will ultimately increase fees for non-Title V permitted sources sufficiently to bring the forecasted budget into balance while still relying on unrestricted “other” revenues such as penalties and settlements to fund part of the cost of the non-Title V permitted source program; and

**WHEREAS**, the SCAQMD Governing Board specifies the manager of Proposed Amended Regulation III – Fees, as the custodian of the documents or other materials which constitute the record of the proceedings upon which the adoption of this proposed amended regulation is based which are located at the South Coast Air Quality Management District, 21865 Copley Drive, Diamond Bar, California 91765; and

**WHEREAS**, the proposed amendments to Regulation III - Fees will not be submitted for inclusion into the State Implementation Plan; and

**NOW, THEREFORE, BE IT RESOLVED**, that the SCAQMD Governing Board does hereby determine, pursuant to the authority granted by law, that the proposed amendments to Regulation III – Fees, including Rules 301, 303, 304, 304.1, 306, 307.1, 308, 309, 311, 313, 314, and 315, are exempt from CEQA pursuant to CEQA Guidelines § 15002(k) – General Concepts, § 15061(b)(3) – Activities Covered By General Rule, and § 15273 – Rates, Tolls, Fares, and Charges. This information was presented to the SCAQMD Governing Board, whose members reviewed, considered, and approved the information therein before acting on the proposed amendments to Regulation III – Fees, including Rules 301, 303, 304, 304.1, 306, 307.1, 308, 309, 311, 313, 314, and 315; and

**BE IT FURTHER RESOLVED**, that the SCAQMD Governing Board finds that Regulation III – Fees, including Rules 301, 303, 304, 304.1, 306, 307.1, 308, 309, 311, 313, 314, and 315 as proposed to be amended, establish fees charged for the purposes of meeting operating expenses, including employee wages and fringe benefits; purchasing and leasing supplies, equipment and materials; meeting financial reserve needs and requirements; and obtaining funds for capital projects necessary to maintain mandated services, all of which are necessary to carry out SCAQMD’s programs; and the SCAQMD Governing Board hereby incorporates by reference the proposed FY 2017-2018 Budget and FY 2018-2019 budget forecast as setting forth the bases for these findings; and

**BE IT FURTHER RESOLVED**, that the SCAQMD Governing Board finds, based on the evidence in the rule making record, that the increases in fees that exceed the CPI for 2017-2018 and 2018-2019 are necessary to carry out SCAQMD programs and are equitably apportioned; and the Governing Board hereby incorporates by reference the explanation in the accompanying Staff Report, as setting forth the bases for these findings; and

**BE IT FURTHER RESOLVED**, that the SCAQMD Governing Board does hereby approve the Socioeconomic Assessment for Automatic Consumer Price Index (CPI) Increase and the Socioeconomic Assessment for PAR III – Fees ; and

**BE IT FURTHER RESOLVED**, that the SCAQMD Governing Board does hereby amend Regulation III – Fees, including Rules 301, 303, 304, 304.1, 306, 307.1, 308, 309, 311, 313, 314, and 315, pursuant to the authority by law, as set forth in the attached and incorporated herein by this reference.

DATE: \_\_\_\_\_

\_\_\_\_\_  
CLERK OF THE BOARDS

# **ATTACHMENTS G1-G12**

## **PROPOSED AMENDED/UPDATED REGULATION III - FEES**

Proposed Amended Rule **301** - Permitting and Associated Fees

Proposed Amended Rule **303** - Hearing Board Fees (CPI Update Only)

Proposed Amended Rule **304** - Equipment, Materials, and Ambient Air Analyses (CPI Update Only)

Proposed Amended Rule **304.1** - Analyses Fees (CPI Update Only)

Proposed Amended Rule **306** - Plan Fees

Proposed Amended Rule **307.1** - Alternative Fees for Air Toxics Emissions Inventory (CPI Update Only)

Proposed Amended Rule **308** - On-Road Motor Vehicle Mitigation Options Fees (CPI Update Only)

Proposed Amended Rule **309** - Fees for Regulation XVI

Proposed Amended Rule **311** - Air Quality Investment Program (AQIP) Fees (CPI Update Only)

Proposed Amended Rule **313** - Authority to Adjust Fees and Due Dates (CPI Update Only)

Proposed Amended Rule **314** - Architectural Coatings (CPI Update Only)

Proposed Amended Rule **315** - Fees for Training Classes and License Renewal (CPI Update Only)

## ATTACHMENT G1

(Adopted Feb. 4, 1977)(Amended May 27, 1977)(Amended Jan. 6, 1978)  
(Amended June 16, 1978)(Amended April 4, 1980)(Amended Sept. 5, 1980)  
(Amended June 5, 1981)(Amended July 9, 1982) (Amended Dec. 3, 1982)  
(Amended June 3, 1983)(Amended May 4, 1984)(Amended July 6, 1984)  
(Amended Nov. 2, 1984)(Amended Dec. 6, 1985)(Amended May 1, 1987)  
(Amended June 3, 1988)(Amended December 2, 1988)(Amended January 6, 1989)  
(Amended June 2, 1989)(Amended June 1, 1990)(Amended June 7, 1991)  
(Amended December 6, 1991)(Amended June 5, 1992)(Amended July 10, 1992)  
(Amended June 11, 1993)(Amended October 8, 1993)(Amended June 10, 1994)  
(Amended May 12, 1995)(Amended October 13, 1995)(Amended May 10, 1996)  
(Amended May 9, 1997)(Amended May 8, 1998)(Amended June 12, 1998)  
(Amended May 14, 1999)(Amended May 19, 2000)(Amended May 11, 2001)  
(Amended May 3, 2002)(Amended June 6, 2003)(Amended July 9, 2004)  
(Amended June 3, 2005)(Amended June 9, 2006)(Amended May 4, 2007)  
(Amended May 2, 2008)(Amended June 5, 2009)(Amended May 7, 2010)  
(Amended May 6, 2011) (Updated July 1, 2012)(Updated July 1, 2013)  
(Amended June 6, 2014)(Amended May 1, 2015)(Updated July 1, 2016)  
(Amended June 2, 2017)

~~Changes to the fees are effective July 1, 2016~~Effective July 1, 2017

### **PROPOSED AMENDED RULE 301. PERMITTING AND ASSOCIATED FEES**

(a) Applicability

California Health and Safety Code Section 40510 provides authority for the South Coast Air Quality Management District to adopt a fee schedule for the issuance of permits to cover the cost of evaluation, planning, inspection, and monitoring related to that activity. This rule establishes such a fee schedule and requires that fees be paid for:

- (1) Permit processing for Facility Permits [see subdivisions (l), ~~and~~ (m), and (n)], Facility Registrations [see subdivision (t)], and Permits to Construct and/or Permits to Operate equipment (submitted pursuant to Regulation II) that may cause air pollution or equipment intended to control air pollution [see subdivision (c)].
- (2) Processing of applications for banking emission reduction credits; change of title of emissions reduction credits; alteration/modification of emission reduction credits; retirement of short term emission reduction credits for transfer into Rule 2202; and the transfer of ERCs out of Rule 2202 pursuant to Rule 2202 (h)(4); or conversion of emissions reduction credits, mobile source credits, or area source credits to short term emission reduction credits, pursuant to Regulation XIII [see paragraphs (c)(4) and (c)(5)].

- (3) Annual operating permit renewal fee [see subdivision (d)].
- (4) Annual operating permit emissions fee [see subdivision (e)] or Regional Clean Air Incentives Market (RECLAIM) Trading Credits (RTCs) [see subdivision (l)].
- (5) Duplicate and reissued permits [see subdivision (f)].
- (6) Reinstating expired applications or permits [see subdivision (g)].
- (7) Reinstating revoked permits [see subdivision (h)].
- (8) RECLAIM Transaction Registration Fee [see subdivision (l)].
- (9) Non-Tradeable Allocation Credit Mitigation Fee [see subdivision (l)].
- (10) Environmental Impact Analysis, Air Quality Analysis, Health Risk Assessment, Public Notification ~~on Significant~~for Projects and Emission Reduction Credits (pursuant to Regulation XIII - New Source Review) [see paragraph (c)(4) and subdivision (i) of this rule].
- (11) Asbestos demolition and renovation activities [see subdivision (n)].
- (12) Lead abatement activities [see subdivision (o)].
- (13) Evaluation of permit applications submitted for compliance under a National Emission Standard for Hazardous Air Pollutants (NESHAP) [see subdivision (p)].
- (14) Certification of Clean Air Solvents [see subdivision (q)].

(b) Definitions

For the purpose of this rule, the following definitions shall apply:

- (1) ALTERATION or MODIFICATION means any physical change, change in method of operation of, or addition to, existing equipment requiring an application for Permit to Construct pursuant to Rule 201. Routine maintenance and/or repair shall not be considered a physical change. A change in the method of operation of equipment, unless previously limited by an enforceable permit condition, shall not include:
  - (A) An increase in the production rate, unless such increase will cause the maximum design capacity of the equipment to be exceeded; or
  - (B) An increase in the hours of operation.
- (2) ALTERNATIVE OPERATING CONDITION is an order established by the Hearing Board pursuant to subdivision (e) of this rule which, if recognized by the United States Environmental Protection Agency, authorizes a source to be operated in a specified manner that would otherwise not comply with an applicable requirement of the State

Implementation Plan or a permit term or condition based on any such applicable requirement.

- (3) BANKING means the process of recognizing and certifying emission reductions and registering transactions involving emission reduction credits.
- (4) CANCELLATION is an administrative action taken by the District which nullifies or voids a previously pending application for a permit.
- (5) CERTIFIED EQUIPMENT PERMIT means a permit issued to a manufacturer or distributor for a specific model or series of models of equipment. By this permit, the District certifies that the equipment meets all District rules and Best Available Control Technology (BACT) requirements under a set of conditions. Eligibility for the certification process shall be limited to equipment for which the following conditions exist, as determined by the Executive Officer:
  - (A) Equipment operation and emission characteristics will be applicable to a number of identical pieces of equipment;
  - (B) Permitting can be accomplished through the use of identical permit conditions for each piece of equipment regardless of use or location;
  - (C) The equipment is exempt from emission offsets as defined in Rule 1304(a)(4) or Rule 1304(a)(5); or the emissions of each criteria pollutant, except lead, are determined to be less than the limits listed in Rule 1303, Appendix A, Table A-1; and
  - (D) The equipment does not emit lead or the toxic emissions do not result in a Maximum Individual Cancer Risk (MICR) equal to or greater than one in a million as calculated according to Rule 1401.

Certified Equipment Permit shall be valid for one year, and shall be renewed annually if the Executive Officer determines the equipment meets all District rules and BACT requirements. Certification shall not relieve the person constructing, installing or operating the equipment from the requirement to obtain all necessary permits to construct and permits to operate, or from compliance with any other District rule including the requirements of Regulation XIII.

- (6) CHANGE OF CONDITION means a change of a current permit condition that will not result in an emission increase. Any request for a Change in Condition to a previously enforceable permit condition that will result in a emission increase subject to the New Source Review Rules in Regulation



XIII, XIV, or XX will be considered a change in the method of operation and processed as an Alteration or Modification.

- (7) CLEAN AIR SOLVENT is as defined in Rule 102 as “Clean Air Solvent”.
- (8) CLEAN AIR SOLVENT CERTIFICATE is as defined in Rule 102 as “Clean Air Solvent Certificate”.
- (9) CONFINED ANIMAL FACILITY (CAF) means a source or group of sources of air pollution at an agricultural source for the raising of 3,360 or more fowl or 50 or more animals, including but not limited to, any structure, building, installation, farm, corral, coop, feed storage area, milking parlor, or system for the collection, storage, or distribution of solid and liquid manure; if domesticated animals, including but not limited to, cattle, calves, horses, sheep, goats, swine, rabbits, chickens, turkeys, or ducks corralled, penned, or otherwise caused to remain in restricted areas for commercial agricultural purposes and feeding is by means other than grazing.
- (10) CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS) is a system comprised of components that continuously measure all parameters necessary to determine pollutant concentration or pollutant mass emissions, pursuant to a District rule or regulation.
  - (A) For the purpose of this rule, a CEMS includes, but is not limited to, the following analyzers, monitors, components, systems, or equipment:
    - (i) Pollutant concentration analyzer(s) (e.g., NO<sub>x</sub>, SO<sub>x</sub>, CO, Total Sulfur) and associated sample collection, transport, and conditioning equipment, and data acquisition and logging systems,
    - (ii) Diluent gas analyzer (O<sub>2</sub> or CO<sub>2</sub>),
    - (iii) Flow monitor (direct in-stack measurement or indirectly calculated from fuel usage or other process parameters approved by the Executive Officer), and
    - (iv) Other equipment (e.g., moisture monitor) as required to comply with monitoring requirements.
  - (B) For the purpose of this rule, a “time-shared CEMS” means a CEMS as described in subparagraph ~~(J)(5)(7)(A)~~ which is common to several sources of emissions at the same facility.
  - (C) For the purpose of this rule, a “Fuel Sulfur Monitoring System” or “FSMS” may be used as an alternative to a CEMS SO<sub>x</sub> monitoring

requirement, subject to District Rules and Regulations, and the approval of the Executive Officer. An FSMS is a total sulfur monitoring system configured similar to the CEMS described in subparagraph ~~(J)(5)(7)(A)~~ but, as an alternative to directly monitoring SO<sub>x</sub> emissions at sources required to have SO<sub>x</sub> CEMS (at the same facility), SO<sub>x</sub> emission information at each affected source is determined “indirectly” by monitoring the sulfur content of the fuel gas supply firing the affected sources.

- (D) For the purpose of this rule, an “Alternative Continuous Emissions Monitoring System” or “ACEMS” (also known as a “Predictive or Parametric Emissions Monitoring System” or “PEMS”) may be used as an alternative to a CEMS pollutant monitoring requirement, subject to District Rules and Regulations, and the approval of the Executive Officer. Instead of directly monitoring the pollutant emissions at a source required to have a CEMS as in subparagraph ~~(J)(5)(7)(A)~~, emission information is “predicted” by the ACEMS or PEMS by monitoring key equipment operating parameters (e.g., temperature, pressure) at the affected source, irrespective of exhaust gas or fuel supply analysis.
- (11) EMISSION FACTOR means the amount of air contaminant emitted per unit of time or per unit of material handled, processed, produced, or burned.
- (12) EMISSION REDUCTION CREDIT (ERC) means the amount of emissions reduction which is verified and determined by the Executive Officer to be eligible for credit in an emissions reduction bank.
- (13) EMISSION SOURCE is any equipment or process subject to Rule 222. The source does not require a permit, but the owner/operator is required to file information pursuant to Rule 222 and Rule 301(t).
- (14) EQUIPMENT means any article, machine, or other contrivance, or combination thereof, which may cause the issuance or control the issuance of air contaminants, and which:
- (A) Requires a permit pursuant to Rules 201 and/or 203; or
- (B) Is in operation pursuant to the provisions of Rule 219
- (15) EXPIRATION means the end of the period of validity for an application, Permit to Operate, or a temporary Permit to Operate.
- (16) FACILITY means any source, equipment, or grouping of equipment or sources, or other air contaminant-emitting activities which are located on

one or more contiguous properties within the District, in actual physical contact or separated solely by a public roadway or other public right-of-way, and are owned or operated by the same person (or persons under common control) or an outer continental shelf (OCS) source as defined in 40 CFR § 55.2. Such above-described groupings, if on noncontiguous properties but connected only by land carrying a pipeline, shall not be considered one facility. Equipment or installations involved in crude oil and gas production in Southern California coastal or OCS waters, and transport of such crude oil and gas in Southern California coastal or OCS waters, shall be included in the same facility which is under the same ownership or use entitlement as the crude oil and gas facility on-shore.

- (17) FACILITY PERMIT is a permit which consolidates existing equipment permits and all new equipment at a facility, into one permit. A facility permit may be issued pursuant to Regulation XX and/or XXX.
- (18) FACILITY REGISTRATION is a permit which consolidates existing equipment permits and all new equipment at a facility into one permit. A Facility Registration may be issued at District discretion to any facility not subject to Regulation XX or XXX.
- (19) GREENHOUSE GAS or “GHG” means carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), sulfur hexafluoride (SF<sub>6</sub>), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs).
- (20) IDENTICAL EQUIPMENT means any equipment which is to be operated by the same operator, and have the same equipment address, and have the same operating conditions and processing material to the extent that a single permit evaluation would be required for the set of equipment. Portable equipment, while not operating at the same location, may qualify as identical equipment.
- (21) NON-ROAD ENGINE is a portable engine that requires a permit and is certified by the Executive Officer to be a Non-Road Engine regulated by U.S. EPA pursuant to 40 CFR Part 89.
- (22) PREMISES means one parcel of land or contiguous parcels of land under the same ownership or entitlement to use, not including the parcels which are remotely located and connected only by land carrying a pipeline.
- (23) QUALIFYING PORTABLE ENGINE is a portable engine that requires a permit and is certified by the Executive Officer to meet all the requirements of Non-Road Engine of 40 CFR Part 89 except date of manufacture, and has

been demonstrated to meet the emission limitations of 40 CFR Section 89.112-96.

- (24) RECLAIM TRADING CREDITS (RTCs) means the amount of emissions credit available to a facility for use at the facility for transfer or sale to another party. Each RTC has a denomination of one pound of RECLAIM pollutant and a term of one year, and can be issued as part of a facility's Annual Allocation or alternatively in the form of an RTC certificate.
- (25) REGISTRATION PERMIT means a permit to construct or permit to operate issued to an owner/operator of equipment which has previously been issued a Certified Equipment Permit by the District. The owner/operator shall agree to operate under the conditions specified in the Certified Equipment Permit.
- (26) RELOCATION means the removal of an existing source from one parcel of land in the District and installation on another parcel of land where the two parcels are not in actual physical contact and are not separated solely by a public roadway or other public right-of-way.
- (27) REVOCATION is an action taken by the Hearing Board following a petition by the Executive Officer which invalidates a Permit to Construct or a Permit to Operate.
- (28) SMALL BUSINESS is as defined in Rule 102 as "Small Business."
- (29) SPECIFIC ORGANIC GASES are any of the following compounds:
  - trifluoromethane (HFC-23)
  - chlorodifluoromethane (HCFC-22)
  - dichlorotrifluoroethane (HCFC-123)
  - tetrafluoroethane (HFC-134a)
  - dichlorofluoroethane (HCFC-141b)
  - chlorodifluoroethane (HCFC-142b)
  - 1,1,1-trifluoroethane (HFC-143a)
  - 1,1-difluoroethane (HFC-152a)
  - cyclic, branched, or linear, completely fluorinated alkanes
  - cyclic, branched, or linear, completely fluorinated ethers with no unsaturations
  - cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations
  - sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

- (30) SOURCE means any grouping of equipment or other air contaminant-emitting activities which are located on parcels of land within the District, in actual physical contact or separated solely by a public roadway or other public right-of-way, and are owned or operated by the same person or by persons under common control. Such above-described groupings, if remotely located and connected only by land carrying a pipeline, shall not be considered one stationary source. (Under RECLAIM, a SOURCE is any individual unit, piece of equipment or process which may emit an air contaminant and which is identified, or required to be identified, in the RECLAIM Facility Permit).
  - (31) STREAMLINED STANDARD PERMIT means a permit issued for certain types of equipment or processes commonly permitted by SCAQMD with pre-set levels of controls and emissions. The operating conditions and other qualifying criteria are pre-determined by the SCAQMD and provided to the permit applicant in the permit application package for concurrence.
  - (32) STATEWIDE EQUIPMENT is equipment with a valid registration certificate issued by CARB for the Statewide Portable Equipment Registration Program.
  - (33) TEMPORARY PERMIT TO OPERATE represents interim authorization to operate equipment until the Permit to Operate is granted or denied. A temporary Permit to Operate is not issued by the District but may exist pursuant to Rule 202.
- (c) Fees for Permit Processing
- (1) Permit Processing Fee
    - (A) Permit Processing Fee Applicability

Except as otherwise provided in this rule, every applicant who files an application for a Permit to Construct, Permit to Operate, Facility Permit, court judgments in favor of the District and administrative civil penalties or a revision to a Facility Permit, shall, at the time of filing, pay all delinquent fees associated with the facility and shall pay a permit processing fee.

      - (i) Except as otherwise provided in this paragraph, the permit processing fee shall be determined in accordance with the schedules (set forth in the Summary Permit Fee Rates tables at the time the application is deemed complete.

- (ii) A person applying for permits for relocation of equipment shall pay fees in accordance with the schedules set forth in the Summary Permit Fee Rates tables at the time the application is deemed complete. All fees due, within the past 3 years, from the previous facility for equipment for which a Change of Location application is filed, and all facility-specific fees (such as “Hot Spots” fees), must be paid before the Change of Location application is accepted.
- (iii) A person applying for permits for any equipment/process not otherwise listed in Table I shall pay the fees associated with Schedule C. Prior to the issuance of a permit, these fees are subject to adjustment, as necessary.
- (iv) For applications submitted prior to July 1, 1990, the applicant shall pay a permit processing fee as specified in the Summary Permit Fee Rates tables, less any previously paid filing fees not to exceed the amount due. These fees are due and payable within thirty (30) days of receipt of notification.
- (v) In the event a Permit to Construct expires under the provisions of Rule 205, and the applicable rules, regulations, and BACT for that particular piece of equipment have not been amended since the original evaluation was performed, the permit processing fee for a subsequent application for a similar equipment shall be the fee established in the Summary Permit Fee Rates - Change of Operator table according to the applicable schedule under the Change of Operator category, provided the subsequent application is submitted within one (1) year from the date of expiration of either the Permit to Construct, or an approved extension of the Permit to Construct.

**(B) Notice of Amount Due and Effect of Nonpayment**

For fees due upon notification, such notice may be given by personal service or by deposit, postpaid, in the United States mail and shall be due thirty (30) days from the date of personal service or mailing. For the purpose of this subparagraph, the fee payment will be considered to be received by the District if it is postmarked by the United States Postal Service on or before the expiration date stated

on the billing notice. If the expiration date falls on a Saturday, Sunday, or a state holiday, the fee payment may be postmarked on the next business day following the Saturday, Sunday, or the state holiday with the same effect as if it had been postmarked on the expiration date. Nonpayment of the fee within this period of time will result in expiration of the application and voiding of the Permit to Construct or Permit to Operate. No further applications will be accepted from the applicant until such time as overdue permit processing fees have been fully paid. If an application is canceled, a permit processing fee will be charged if evaluation of the application has been initiated.

- (C) **Payment for Permit Processing of Equipment Already Constructed**  
In the case of application for a Permit to Operate equipment already constructed, or where a Permit to Construct was granted prior to August 1, 1982, the applicant shall pay the permit processing fee within thirty (30) days of receipt of notification. In the case where a portion of the permit evaluation fee was paid when a Permit to Construct was granted, the amount paid shall be credited to the amount due for permit processing in accordance with the Summary Permit Fee Rates tables, and shall be due within thirty (30) days of receipt of notification. In both cases, payment shall be as specified in subparagraph (c)(1)(B) of this rule. If, at the time the Permit to Operate is granted or denied, it is determined that any annual operating permit fee as provided in subdivision (d) of this rule had been based on incorrect information, the applicant will be billed for or credited with the difference, as appropriate.
- (D) **Higher Fee for Failing to Obtain a Permit**
- (i) When equipment is operated, built, erected, installed, altered, or replaced (except for replacement with identical equipment) without the owner/operator first obtaining a required Permit to Construct or Permit to Operate, the permit processing fee shall be 150 percent (150%) of the amount set forth in the Summary Permit Fee Rates tables of this rule unless the applicant is a Small Business as defined in this provision and the facility has no prior permit applications, Permit to Construct or Permit to Operate (as evidenced by a

facility identification number) with the District in which case the permit processing fee shall be the amount set forth in the Summary Permit Fee Rates tables of this rule. If a facility has been issued a Notice of Violation (NOV), there shall be no waiver of the higher fee. The applicant shall also remit annual operating fees for the source for a full three (3) years, or the actual years of operation if less than three (3) years. The assessment of such fee shall not limit the District's right to pursue any other remedy provided for by law. Fees are due and payable within thirty (30) days of receipt of notification. [See subparagraph (c)(2)(B).] However, the higher fee shall be waived if the application is being submitted for equipment that was previously permitted (issued either a Permit to Construct or a Permit to Operate) but had expired due to non-payment of fees, provided the application is submitted within one (1) year of the expiration date, and that permit is reinstatable under subdivision (g) of this rule.

(ii) For purposes of assessing a higher fee for failing to obtain a permit only, small business shall be defined as a business which is independently owned and operated and not an affiliate of a non-small business entity and meets the following criteria:

(A) If a non-manufacturer, the number of employees is 25 or less and the total gross annual receipts are \$1,000,000 or less; or

(B) If a manufacturer, the number of employees is 50 or less and the total gross annual receipts are \$5,000,000 or less, or

(C) Is a not-for-profit training center.

(E) Small Business

When applications are filed in accordance with the provisions of subparagraphs (c)(1)(A), (c)(1)(H)(i), (c)(1)(D) or paragraph (c)(3) for a ~~Small b~~Business as defined in Rule 102 – Definition of Terms, the fees assessed shall be fifty percent (50%) of the amount set forth in the Summary Permit Fee Rates - Permit Processing, Change of



Conditions, Alteration/Modifications table and in the Summary of ERC Processing Rates, Banking, Change of Title, Alteration/Modification, Conversion to Short Term Credits, Re-Issuance of Short Term Credits, Retirement of Short Term Credits for Transfer Into Rule 2202, and Transfer of ERCs Out of Rule 2202 table.

- (F) Fees for Permit Processing for Identical Equipment and Processing of Applications for Short Term Emission Reduction Credits  
When applications are submitted in accordance with the provisions of subparagraphs (c)(1)(A), (c)(1)(D), (c)(1)(E), (c)(1)(I), paragraphs (c)(3) or (c)(4) concurrently for identical equipment, or for change of title or alteration/modification of short term emission reduction credits, full fees for the first application, and fifty percent (50%) of the applicable processing fee for each additional application shall be assessed. The provisions of this subparagraph do not apply to Certified Equipment Permits, Registration Permits, and the exceptions mentioned in subparagraphs (c)(3)(A), (c)(3)(B), and (c)(3)(C). This subparagraph shall, upon request of the applicant, apply to applications which have been received before July 1, 1996, but not yet been processed or which have not received final determination regarding applicable permit processing fees.
- (G) Discounts for Small Business and Identical Equipment  
Applications qualifying with the provisions of both subparagraph (c)(1)(E) and (c)(1)(F) shall only be entitled to one fee discount equivalent to the maximum discount afforded under either subparagraph.
- (H) Fees for Permit Processing for Certified Equipment Permits and Registration Permits
  - (i) Persons applying for a Certified Equipment Permit shall pay a one-time permit processing fee for each application. The fee shall be determined in accordance with the Summary Permit Fee Rates tables of this rule. No annual operating permit renewal fee shall be charged.
  - (ii) A permit processing fee equal to 50% of Schedule A Permit Processing Fee of the Summary Permit Fee Rates table shall

be assessed to a person applying for a Change of Operator for a Certified Equipment Permit.

- (iii) A permit processing fee equal to 50% of Schedule A Permit Processing Fee of the Summary Permit Fee Rates table shall be charged to a person applying for a Registration Permit to Construct and Permit to Operate for certified equipment. Annual operating permit renewal fees shall be paid pursuant to subdivision (d).
- (iv) When certified equipment is built, erected, installed, or replaced (except for identical replacement) without the owner/operator obtaining a required Rule 201 Permit to Construct, the permit processing fee assessed shall be 150 percent (150%) of the amount set forth in subparagraph (c)(1)(H)(iii) of Rule 301.

**(I) Applications Submitted for Equipment Previously Exempted by Rule 219**

When applications for equipment are submitted within one year after the adoption of the most recent amendment to Rule 219 and are filed in accordance with the provisions of subparagraphs (c)(1)(A), (c)(1)(F), paragraphs (c)(2), or (c)(3) and require a permit, solely due to the most recent amendments to Rule 219, the permit processing fees assessed shall be in accordance with Schedule A.

**(J) Standard Streamlined Permits**

The Streamlined Standard Permit application processing fee shall be ~~\$844.45~~\$865.01 for FY 2017-18 and ~~\$899.61~~ for FY 2018-19 and thereafter, except that the fee shall not exceed the applicable permit processing fee including small business discount if applicable. There shall be no small business discount on the basic fee of ~~\$844.45~~\$865.01 for FY 2017-18 and ~~\$899.61~~ for FY 2018-19 and thereafter. Applications submitted for existing equipment which is operating and qualifies for a Streamlined Standard Permit shall be assessed an application processing fee in accordance with the provisions of subparagraph 301(c)(1)(D). Standard Streamlined Permits may be issued for the following equipment or processes: Replacement dry-cleaning equipment and Lithographic printing equipment.

(2) Fee for Change of Operator or Additional Operator

Under Rule 209 (Transfer and Voiding of Permits), a permit granted by the District is not transferable. Every applicant who files an application for a change of operator or additional operator with the same operating conditions of a Permit to Operate shall be subject to a permit processing fee as follows:

(A) The permit processing fee shall be as established in the Summary Permit Fee Rates - Change of Operator table for equipment at one location so long as the new operator files an application for a Permit to Operate within one (1) year from the last renewal of a valid Permit to Operate and does not change the operation of the affected equipment. All fees billed from the date of application submittal that are associated with the facility for equipment for which a Change of Operator or Additional Operator application is filed, and all facility-specific fees (such as “Hot Spots” fees), must be paid before the Change of Operator or Additional Operator application is accepted. If after an application is received and SCAQMD determines that fees are due, the new operator shall pay such fees within 30 days of notification. If the fees are paid timely, the operator will not be billed for any additional fees billed to the previous operator.

(B) If an application for change of operator of a permit is not filed within one (1) year from the last annual renewal of the permit under the previous operator, the new operator shall submit an application for a new Permit to Operate, along with the permit processing fee as prescribed in subparagraph (c)(1)(A). A higher fee, as described in subparagraph (c)(1)(D), shall apply.

(3) Change of Operating Condition, Alteration/Modification/Addition

All delinquent fees, and court judgments in favor of the District and administrative civil penalties associated with the facility must be paid before a Change of Operating Condition, Alteration/Modification /Addition application will be accepted. When an application is filed for a permit involving change of operating conditions, and/or a permit involving proposed alterations/modifications or additions resulting in a change to any existing equipment for which a Permit to Construct or a Permit to Operate was granted and has not expired in accordance with these rules, the permit

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processing fee shall be the amount set forth in the Summary Permit Fee Rates tables. The only exceptions to this fee shall be:

- (A) Permits that must be reissued with conditions prohibiting the use of toxic materials and for which no evaluation is required, no physical modifications of equipment are made, and the use of substitute materials does not increase Volatile Organic Compounds (VOC) by more than 0.5 pound in any one day. When an application is filed for a modification described by this exception, the permit processing fee shall be the applicable fee as shown in the table below in this subparagraph:

<u>Facility Type</u>	<u>Non-Title V</u>	<u>Title V</u>
<u>FY 2017 -18</u>	<u>\$922.10</u>	<u>\$958.98</u>
<u>FY 2018-19 and thereafter</u>	<u>\$1,028.50</u>	<u>\$1,193.06</u>

- (B) Permits that must be reissued to reflect the permanent removal of a standby fuel supply, or to render equipment non-operational shall pay the applicable reissue permit fee as shown in the tables below in this subparagraph, which has follows:

- (i) Does not result in a new source review emission adjustment:-  
~~A reissue permit per equipment/reissued permit fee of \$594.18 pursuant to Rule 301(f) shall be charged;~~

<u>Facility Type</u>	<u>Non-Title V (per equipment or reissued permit)</u>	<u>Title V (per equipment or reissued permit)</u>
<u>FY 2017 -18</u>	<u>\$633.40</u>	<u>\$706.48</u>
<u>FY 2018-19 and thereafter</u>	<u>\$658.73</u>	<u>\$819.52</u>

~~or~~

- (ii) Does Result in a new source review emission adjustment:-  
~~A reissued permit fee of \$1,557.831,660.65 for FY2017-18,~~

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~~\$1,727.07 for FY2018-19 and thereafter and thereafter per equipment shall be charged.~~

<u>Facility Type</u>	<u>Non-Title V (per equipment)</u>	<u>Title V (per equipment)</u>
<u>FY 2017 -18</u>	<u>\$1,660.65</u>	<u>\$1,852.26</u>
<u>FY 2018-19 and thereafter</u>	<u>\$1,727.07</u>	<u>\$2,148.62</u>

- (C) Permits reissued for an administrative change in permit description, for splitting a permit into two or more permits based on Equipment/Process listed in Table IA or IB (an application is required for each Equipment/Process) or for a change in permit conditions based on actual operating conditions and which do not require any engineering evaluation and do not cause a change in emissions, shall be charged a fee according to the following schedule:

<b>Schedule</b>	<b><u>Non-Title V FY 2017-18 Re-Issuance Fee for FY 08-09 and Thereafter</u></b>	<b><u>Title V FY 2017-18</u></b>	<b><u>Non-Title V FY 2018-19 and thereafter</u></b>	<b><u>Title V FY 2018-19 and thereafter</u></b>
A	<del>\$594.18</del> <u>633.40</u>	<u>\$658.73</u>	<u>\$706.48</u>	<u>\$819.52</u>
A1	<del>\$594.18</del> <u>633.40</u>	<u>\$658.73</u>	<u>\$706.48</u>	<u>\$819.52</u>
B	<del>\$811.45</del> <u>865.01</u>	<u>\$899.61</u>	<u>\$964.81</u>	<u>\$1,119.18</u>
B1	<del>\$811.45</del> <u>865.01</u>	<u>\$899.61</u>	<u>\$964.81</u>	<u>\$1,119.18</u>
C	<del>\$811.45</del> <u>865.01</u>	<u>\$899.61</u>	<u>\$964.81</u>	<u>\$1,119.18</u>
D	<del>\$811.45</del> <u>865.01</u>	<u>\$899.61</u>	<u>\$964.81</u>	<u>\$1,119.18</u>
E	<del>\$811.45</del> <u>865.01</u>	<u>\$899.61</u>	<u>\$964.81</u>	<u>\$1,119.18</u>
F	<del>\$811.45</del> <u>865.01</u>	<u>\$899.61</u>	<u>\$964.81</u>	<u>\$1,119.18</u>

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Schedule	<u>Non-Title V</u> <u>FY 2017-18</u> <b>Re-Issuance</b> <b>Fee for FY</b> <b>08-09 and</b> <b>Thereafter</b>	<u>Title V</u> <u>FY 2017-18</u>	<u>Non-Title V</u> <u>FY 2018-19</u> <b>and</b> <b>thereafter</b>	<u>Title V</u> <u>FY 2018-19</u> <b>and</b> <b>thereafter</b>
G	\$811.45 865.01	\$899.61	\$964.81	\$1,119.18
H	\$811.45 865.01	\$899.61	\$964.81	\$1,119.18

- (D) For permits reissued because of Rule 109 or Rule 109.1, which do not result in Best Available Control Technology (BACT) determination, the permit processing fee shall be 50% of the amount set forth in the Summary Permit Fee Rules tables.
- (4) Fee for Evaluation of Applications for Emission Reductions  
Every applicant who files an application for banking of emission reduction credits; change of title of emission reduction credits; alteration/modification of emission reduction credits; or conversion of emission reduction credits, mobile source credits, or area source credits to short term emission reduction credits, as described in paragraph (a)(2) of this rule shall, at the time of filing, pay a processing fee in accordance with Schedule I in the Summary Permit Fee Rates tables. Additionally, the applicant shall, if required by Rule 1310(c), either:
- (A) Pay a fee for publication of public notice, as specified in Table II (B) and a preparation fee as per Rule 301(i)(4), or
- (B) arrange publication of the public notice independent of the District option and provide to the Executive Officer a copy of the proof of publication.
- (5) Fees for Retirement of Short Term Emission Reduction Credits for Transfer into Rule 2202, and for ERCs Transfer Out of Rule 2202.  
Any applicant who files an application to transfer a short term emission reduction credit certificate into Rule 2202 or to transfer ERCs out of Rule 2202 pursuant to Rule 2202 – On-Road Motor Vehicle Mitigation Options shall, at the time of filing, pay the fee as listed in the Summary of ERC Processing Rates, Banking, Change of Title, Alteration/Modification, Conversion to Short Term Credits, Re-Issuance of Short Term Credits,

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Retirement of Short Term Credits for Transfer Into Rule 2202, and Transfer of ERCs Out of Rule 2202 table.

(d) Annual Operating Permit Renewal Fee

(1) Renewal of Permit to Operate

All Permits to Operate (including temporary Permits to Operate pursuant to Rule 202) for equipment on the same premises shall be renewed on the annual renewal date set by the Executive Officer. A Permit to Operate is renewable if the permit is valid according to the District's Rules and Regulations and has not been voided or revoked and if the annual operating permit fee is paid within the time and upon the notification specified in paragraph (d)(8) of this rule and if all court judgments in favor of the District and administrative civil penalties associated with the facility are paid.

(2) Annual Operating Fees

The annual operating permit renewal fee shall be assessed in accordance with the following schedules:

<b><u>Equipment/Process Schedules in Tables IA and IB</u></b>	<b><u>Non-Title V Annual Operating Permit Renewal Fee</u></b>	<b><u>Title V Annual Operating Permit Renewal Fee</u></b>
<del>Equipment/Processes appearing in Tables IA and IB as Schedule A1</del>	<del>\$177.09</del> 188.78 for FY 2017-18 and <del>\$218.98</del> 196.33 for FY 2018-19 and thereafter	<del>\$210.56 for FY 2017-18 and \$244.25 for FY 2018-19 and thereafter</del>
<del>Equipment/Processes appearing in Tables IA and IB as Schedules A, B, and B1-B1</del> (excluding Rule 461 liquid fuel dispensing nozzles)	<del>\$354.86</del> 378.28 for FY2017-18 and <del>\$393.41</del> for FY2018-19 and thereafter	<del>\$421.93 for FY2017-18 and \$489.44 for FY2018-19 and thereafter</del>
<del>Equipment/Processes appearing in Tables IA and IB as Schedules C and D</del>	<del>\$1,270.97</del> 1,354.85 for FY2017-18 and <del>\$1,409.05</del> for FY2018-19 and thereafter	<del>\$1,511.18 for FY2017-18 and \$1,752.97 for FY2018-19 and thereafter</del>
<del>Equipment/Processes appearing in Tables IA and IB as Schedules E, F, G, and H</del>	<del>\$3,051.76</del> 3,253.18 for FY2017-18 and <del>\$3,383.30</del> for FY2018-19 and thereafter	<del>\$3,628.54 for FY2017-18 and \$4,209.11 for FY2018-19 and thereafter</del>
Rule 461 liquid fuel dispensing system	<del>\$404.94</del> 111.83 for FY2017-18 and <del>\$116.31</del> for FY2018-19 and thereafter	<del>\$124.74 for FY2017-18 and \$144.70 for FY2018-19 and thereafter</del>

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	per product dispensed per nozzle	<u>thereafter per product dispensed per nozzle</u>
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In Aaddition to the annual operating permit renewal fees based on equipment/process, each RECLAIM/Title V facility shall pay the additional fee of:

Title V Facility	<del>-\$611.73</del> <u>14.49</u> for FY2017-18 and; <u>\$709.61</u> for FY2018-19 and thereafter per facility
RECLAIM Facility	<del>-\$853.74</del> <u>110.09</u> for FY2017-18 and; <u>\$946.49</u> for FY2018-19 and thereafter per Major Device
	<del>-\$170.75</del> <u>182.02</u> for FY2017-18 and; <u>\$189.30</u> for FY2018-19 and thereafter per Large Device
	<del>-\$170.75</del> <u>182.02</u> for FY2017-18 and; <u>\$189.30</u> for FY2018-19 and thereafter per Process Unit Device
RECLAIM and Title V Facility	RECLAIM fee + Title V fee

(3) Credit for Solar Energy Equipment

Any permittee required to pay an annual operating permit renewal fee shall receive an annual fee credit for any solar energy equipment installed at the site where the equipment under permit is located. Solar energy projects that receive grant funding from the Rule 1309.1 – Priority Reserve account shall not be eligible for this annual fee credit.

(A) Computation

The design capacity of the solar energy equipment expressed in thousands of British Thermal Units (Btu) per hour shall be used to determine the fee credit calculated at ~~\$1.86~~1.91 per 1,000 Btu.

(B) Limitation

The solar energy credit shall not exceed the annual operating permit renewal fee for all permits at the site where the solar energy equipment is located.

(4) Renewal of Temporary Permit to Operate New Equipment

A Permit to Construct, which has not expired or has not been canceled or voided, will be considered a temporary Permit to Operate on the date the applicant completes final construction and commences operation, pursuant to subdivision (a) of Rule 202. For the purposes of this paragraph, the date specified as the estimated completion date on the application for Permit to



Construct will be considered the date of commencement of operation, unless the applicant notifies the District in writing that operation will commence on another date, or unless the equipment already has been placed in operation. Such temporary Permit to Operate shall be valid for the period of time between commencement of operation and the applicant's next annual renewal date following commencement of operation and shall be subject to a prorated amount of the annual operating permit renewal fee prescribed in paragraph (d)(2). The proration shall be based on the time remaining to the next annual renewal date. On that next annual renewal date, and each year thereafter, the annual operating permit renewal fee for the temporary Permit to Operate shall be due in the amount prescribed in paragraph (d)(2).

**(5) Renewal of Temporary Permit to Operate Existing Equipment**

In the case of equipment operating under a temporary Permit to Operate issued pursuant to subdivision (c) of Rule 202, where a Permit to Construct was not issued, the company is immediately subject to a prorated amount of the annual operating permit renewal fee prescribed in paragraph (d)(2) following the submission of the completed application for Permit to Operate. The proration shall be based on the time remaining to the next annual renewal date. On that next annual renewal date, and each year thereafter, the annual operating permit renewal fee shall be due in the amount prescribed in paragraph (d)(2). If no annual renewal date has been established, the Executive Officer shall set one upon receipt of the application.

**(6) Annual Renewal Date**

If, for any reason, the Executive Officer determines it is necessary to change the annual renewal date, all annual operating permit renewal fees shall be prorated according to the new annual renewal date.

**(7) Annual Renewal Date for Change of Operator**

The same annual renewal date shall apply from one change of operator to another.

**(8) Notice of Amount Due and Effect of Nonpayment**

At least thirty (30) days before the annual renewal date, the owner/operator of equipment under permit will be notified by mail of the amount to be paid and the due date. If such notice is not received at least thirty (30) days before the annual renewal date, the owner/operator of equipment under

permit shall notify the District on or before the permit renewal date that said notice was not received. The annual operating permit renewal fee for each permit shall be in the amount described in paragraph (d)(2). If the annual operating permit renewal fee is not paid within thirty (30) days after the due date, the permit will expire and no longer be valid. In the case of a RECLAIM facility, if the individual device fee(s) are not paid, the application(s) associated with the device(s) shall expire and no longer be valid. For a Title V facility, if the Title V facility fee, which is not based on any specific equipment but applies to the whole facility, is not paid, the Title V facility permit shall expire. In such a case, the owner/operator will be notified by mail of the expiration and the consequences of operating equipment without a valid permit, as required by Rule 203 (Permit to Operate). For the purpose of this paragraph, the fee payment will be considered to be received by the District if it is postmarked by the United States Postal Service on or before the expiration date stated on the billing notice. If the expiration date falls on a Saturday, Sunday, or a state holiday, the fee payment may be postmarked on the next business day following the Saturday, Sunday, or state holiday with the same effect as if it had been postmarked on the expiration date.

(9) Annual Operating Fees for Redundant Emission Controls

Any person holding permits to operate for two or more emission controls applicable to the same equipment who establishes that any of the emission controls is redundant, i.e., not necessary to assure compliance with all applicable legal requirements, shall not be required to pay annual operating permit renewal fees under subdivision (d) for the redundant equipment. The Executive Officer may reinstate the obligation to pay such fees at any time upon determination that operating the control is or has become necessary to assure compliance with any applicable legal requirements.

(e) Annual Operating Emissions Fee

(1) Annual Operating Emission Fee Applicability

In addition to the annual operating permit renewal fee, the owner/operator of all equipment operating under permit shall pay an annual emissions fee based on the total weight of emissions of each of the contaminants specified in Table III from all equipment used by the operator at all locations, including total weight of emissions of each of the contaminants specified in

Table III resulting from all products which continue to passively emit air contaminants after they are manufactured, or processed by such equipment, with the exception of such product that is shipped or sold out of the District so long as the manufacturer submits records which will allow for the determination of emissions within the District from such products.

(2) Emissions Reporting and Fee Calculation

For the reporting period July 1, 2000 to June 30, 2001, and all preceding reporting periods, emissions from equipment not requiring a written permit pursuant to Regulation II shall be reported but not incur a fee for emissions so long as the owner/operator keeps separate records which allow the determination of emissions from such non-permitted equipment. Notwithstanding the above paragraph, for the purposes of Rule 317 – Clean Air Act Non-Attainment Fees, all major stationary sources of NO<sub>x</sub> and VOC, as defined in Rule 317, shall annually report and pay the appropriate clean air act non-attainment fees for all actual source emissions including but not limited to permitted, unpermitted, unregulated and fugitive emissions. Beginning with the reporting period of July 1, 2001 to June 30, 2002, and for subsequent reporting periods, each facility with total emissions including emissions from equipment or processes not requiring a written permit pursuant to Regulation II greater than or equal to the threshold amount of contaminants listed in paragraph (e)(5) shall report all emissions and incur an emissions fee as prescribed in Table III.

Non-permitted emissions which are not regulated by the District shall not be reported and shall be excluded from emission fees if the facility provides a demonstration that the emissions are not regulated and maintains sufficient records to allow the accurate demonstration of such non-regulated emissions.

(3) Exception for the Use of Clean Air Solvents

An owner/operator shall not pay a fee for emissions from the use of Clean Air Solvents issued a valid Certificate from the District so long as the facility submits separate records which allow the determination of annual emissions, usage, and identification of such products. A copy of the Clean Air Solvent certificate issued to the manufacturer or distributor shall be submitted with the separate records.

(4) Flat Annual Operating Emission Fee

The owner/operator of all equipment operating under at least one permit (not including certifications, registrations or plans) shall each year be assessed a flat annual emissions fee of \$~~124.35~~127.46.

(5) Emission Fee Thresholds

Each facility with emissions greater than or equal to the threshold amount of the contaminant listed below shall be assessed a fee as prescribed in Table III. ~~For the six month transitional reporting period pursuant to subparagraph (e)(8)(B) (July 1, 2007 through December 31, 2007), the fee shall be assessed on emissions greater than or equal to one half (1/2) of the threshold amount listed below.~~

**TABLE III**

<b>Air Contaminant(s)</b>	<b>Annual Emissions Threshold (TPY)</b>
<b>Gaseous sulfur compounds</b> (expressed as sulfur dioxide)	<b>≥4 TPY</b>
<b>Total organic gases</b> (excluding methane, exempt compounds as specified in paragraph (e)(13), and specific organic gases as specified in paragraph (b)(28))	<b>≥4 TPY</b>
<b>Specific organic gases</b>	<b>≥4 TPY</b>
<b>Oxides of nitrogen</b> (expressed as nitrogen oxide)	<b>≥4 TPY</b>
<b>Total particulate matter</b>	<b>≥4 TPY</b>
<b>Carbon monoxide</b>	<b>≥100 TPY</b>

(6) Clean Fuels Fee Thresholds

Each facility emitting 250 tons or more per year (≥250 TPY) of ~~any of the above referenced contaminants~~ Volatile Organic Compounds, Nitrogen Oxides, Sulfur Oxides and Particulate Matter shall pay an annual clean fuels fee as prescribed in Table V (California Health and Safety Code Section 40512).

(7) Fees for Toxic Air Contaminants or Ozone Depleters

Each facility emitting a toxic air contaminant or ozone depleter greater than or equal to the annual thresholds listed in Table IV shall be assessed an annual emissions fee as indicated therein. ~~For the six month transitional reporting period pursuant to subparagraph (e)(8)(B) (July 1, 2007 through December 31, 2007), the fee shall be assessed on emissions greater than or equal to one half (1/2) of the threshold amount listed in Table IV. The~~

annual emissions fee for toxic air contaminants and ozone depleters shall be based on the total weight of emissions of these contaminants associated with all equipment and processes including, but not limited to, material usage, handling, processing, loading/unloading; combustion byproducts, and fugitives (equipment/component leaks).

- (A) Any dry cleaning facility that emits less than two (2) tons per year of perchloroethylene ~~or less than one (1) ton per year for the six month transitional reporting period from July 1, 2007 through December 31, 2007~~, and qualifies as a small business as defined in the general definition of Rule 102, shall be exempt from fees listed in Table IV. This provision shall be retroactive to include the July 10, 1992, rule amendment which included perchloroethylene in Table IV.
  - (B) Any facility that emits less than two (2) tons per year, ~~or less than one (1) ton per year for the six month transitional reporting period from July 1, 2007 through December 31, 2007~~ of formaldehyde, perchloroethylene, or methylene chloride, may petition the Executive Officer, at least thirty (30) days prior to the official submittal date of the annual emissions report as specified in paragraph (e)(10), for exemption from formaldehyde, perchloroethylene, or methylene chloride fees as listed in Table IV. Exemption from emissions fees shall be granted if the facility demonstrates that no alternatives to the use of these substances exist, no control technologies exist, and that the facility qualifies as a small business as defined in the general definition of Rule 102.
- (8) Reporting of Total Emissions from Preceding Reporting Period and Unreported or Under-reported Emissions from Prior Reporting Periods
- (A) The owner/operator of equipment subject to paragraph (e)(1), (e)(2), (e)(5), (e)(6), and (e)(7) shall report to the Executive Officer the total emissions for the immediate preceding reporting period of each of the air contaminants concerned from all equipment. The report shall be made at the time and in the manner prescribed by the Executive Officer. The permit holder shall report the total emissions for the twelve (12) month period reporting for each air contaminant concerned from all equipment or processes, regardless of the quantities emitted.

~~(B)~~ During the period of July 1, 1994, through December 31, 2007, the reporting period for annual operating emissions fees shall be from July 1 of a given year through June 30 of the following year. A six-month emissions report and fees will be due for the reporting period from July 1, 2007 through December 31, 2007. Beginning January 1, 2008, the reporting period for annual operating emissions fees shall be from January 1 through December 31 of each year.

~~(C)~~(B) The Executive Officer will determine default emission factors applicable to each piece of permitted equipment or group of permitted equipment, and make them available to the owner/operator in a manner specified by the Executive Officer and provide them to the owner/operator upon request. In determining emission factors, the Executive Officer will use the best available data. A facility owner/operator can provide alternative emission factors that more accurately represent actual facility operations subject to the approval of the Executive Officer.

~~(D)~~(C) A facility owner/operator shall report to the Executive Officer, in the same manner, and quantify any emissions of air contaminants in previous reporting periods which had not been reported correctly and should have been reported under the requirements in effect in the reporting period in which the emissions occurred.

(9) Request to Amend Emissions Report and Refund of Emission Fees

(A) A facility owner/operator shall submit a written request (referred to as an "Amendment Request") for any proposed revisions to previously submitted annual emissions reports. Amendment requests with no fee impact, submitted after one (1) year and ~~sixty~~ seventy five (75) days from the official due date ~~(July 1 or January 1 as applicable)~~ of the subject annual emissions report shall include a non-refundable standard evaluation fee of ~~\$324.54~~ \$332.65 for each subject facility and reporting period. Evaluation time beyond two hours shall be assessed at the rate of ~~\$162.29~~ \$166.35 per hour and shall not exceed ten (10) hours. Amendment requests received within one year (1) and ~~sixty~~ seventy five (75) days from the official due date ~~(July 1 or January 1 as applicable)~~ of a previously submitted annual emissions report shall not incur any

such evaluation fees. The Amendment Request shall include all supporting documentation and copies of revised applicable forms.

- (B) A facility owner/operator shall submit a written request (referred to as a “Refund Request”) to correct the previously submitted annual emissions reports and request a refund of overpaid emission fees. Refund Requests must be submitted within one (1) year and ~~sixty (60)~~seventy five (75) days from the official due date (~~July 1 or January 1 as applicable~~) of the subject annual emissions report to be considered valid. The Refund Request shall include all supporting documentation and copies of revised applicable forms. If the Refund Request is submitted within one (1) year and ~~sixty (60)~~seventy five (75) days from the official due date (~~July 1 or January 1 as applicable~~) of the subject annual emissions report, and results in no fee impact, then the facility owner/operator shall be billed for the evaluation fee pursuant to subparagraph (e)(9)(A).

(10) Notice to Pay and Late Filing Surcharge

- (A) A notice to report emissions and pay the associated emission fees will be mailed annually to the owners/operators of all equipment (as shown in District records) to which this subdivision applies. A notice to pay the semi-annual fee specified in paragraph (e)(11) will also be mailed to facilities which in the preceding reporting year emitted any air contaminant equal to or greater than the emission thresholds specified in subparagraph (e)(11)(A). Emissions reports and fee payments are the responsibility of the owner/operator regardless of whether the owner/operator was notified. ~~The due dates to submit the emissions fees and reports for:~~

(i) ~~Semi-annual reports are January 1 for fiscal year reporting during July 1, 1994 through December 31, 2007, and July 1 for calendar year reporting beginning January 1, 2008 and after.~~

(ii) ~~(ii) Annual reports are July 1 for fiscal year reporting during July 1, 1994 through December 31, 2007, and January 1 for calendar year reporting beginning January 1, 2008 and after.~~

If both the fee payment and the completed emissions report are not received by the ~~sixtieth (60th)~~seventy-fifth (75<sup>th</sup>) day following ~~January 1 or July 1 as applicable~~ (for semi-annual reports), or July

~~1 or January 1 as applicable~~ (for annual reports), they shall be considered late, and surcharges for late payment shall be imposed as set forth in subparagraph (e)(10)(B). For the purpose of this subparagraph, the emissions fee payment and the emissions report shall be considered to be timely received by the District if it is postmarked on or before the ~~sixtieth (60th)~~ seventy-fifth (75<sup>th</sup>) day following the official due date ~~(July 1 or January 1 as applicable)~~. If the ~~sixtieth (60th)~~ seventy-fifth (75<sup>th</sup>) day falls on a Saturday, Sunday, or a state holiday, the fee payment and emissions report may be postmarked on the next business day following the Saturday, Sunday, or the state holiday with the same effect as if they had been postmarked on the ~~sixtieth (60th)~~ seventy-fifth (75<sup>th</sup>) day.

- (B) If fee payment and emissions report are not received within the time prescribed by subparagraph (e)(10)(A), a surcharge shall be assessed and added to the original amount of the emission fee due according to the following schedule:

Less than 30 days	5% of reported amount
30 to 90 days	15% of reported amount
91 days to 1 year	25% of reported amount
More than 1 year	(See subparagraph (e)(10)(D))

- (C) If an emission fee is timely paid, and if, within one year after the ~~sixtieth (60th)~~ seventy-fifth (75<sup>th</sup>) day from the official due date is determined to be less than ninety percent (90%) of the full amount that should have been paid, a fifteen percent (15%) surcharge shall be added, and is calculated based on the difference between the amount actually paid and the amount that should have been paid, to be referred to as underpayment. If payment was ninety percent (90%) or more of the correct amount due, the difference or underpayment shall be paid but with no surcharges added. The fee rate to be applied shall be the fee rate in effect for the year in which the emissions actually occurred. If the underpayment is discovered after one (1) year and ~~sixty (60)~~ seventy five (75) days from the official fee due date, fee rates and surcharges will be assessed based on subparagraph (e)(10)(D).



- (D) The fees due and payable for the emissions reported or reportable pursuant to subparagraph (e)(8)(D) shall be assessed according to the fee rate for that contaminant specified in Tables III, IV, and V, and further increased by fifty percent (50%). The fee rate to be applied shall be the fee rate in effect for the year in which the emissions are actually reported, and not the fee rate in effect for the year the emissions actually occurred.
- (E) If one hundred twenty (120) days have elapsed since January 1st, July 1st, or as applicable, and all emission fees including any surcharge have not been paid in full, the Executive Officer may take action to revoke all Permits to Operate for equipment on the premises, as authorized in Health and Safety Code Section 42307.
- (11) Semi-Annual Emissions Fee Payment
- (A) For facilities emitting the threshold amount of any contaminant listed below, the Executive Officer will estimate one half (1/2) of the previous annual emission fees and request that the permit holder pay such an amount as the first installment on annual emission fees for the current reporting period. ~~The installment payment for calendar year 2008 annual emission fees will be based on one half (1/2) of the emissions reported for fiscal year 2006-2007.~~

<b>Air contaminant(s)</b>	<b>Annual emissions threshold (TPY)</b>
<b>Gaseous sulfur compounds</b> (expressed as sulfur dioxide)	<b>≥10 TPY</b>
<b>Total organic gases</b> (excluding methane, exempt compounds as specified in paragraph (e)(13), and specific organic gases as specified in paragraph (b)(28))	<b>≥10 TPY</b>
<b>Specific organic gases</b>	<b>≥10 TPY</b>
<b>Oxides of nitrogen</b> (expressed as nitrogen dioxide)	<b>≥10 TPY</b>
<b>Total particulate matter</b>	<b>≥10 TPY</b>
<b>Carbon monoxide</b>	<b>≥100 TPY</b>

- (B) In lieu of payment of one half the estimated annual emission fees, the owner/operator may choose to report and pay on actual emissions for the first six months (~~July 1 through December 31 for~~

~~fiscal year reporting prior to January 1, 2008 or January 1 through June 30 for calendar year reporting beginning January 1, 2008 and thereafter).~~ By ~~July 1 or January 1 as applicable~~of the year following the reporting period, the permit holder shall submit a final Annual Emission Report together with the payment of the balance; the annual emission fees less the installment previously paid. ~~For fiscal year reporting prior to January 1, 2008, the report shall contain an itemization of emissions from July 1 through June 30 of the applicable year. For calendar year reporting beginning January 1, 2008 and thereafter,~~The report shall contain an itemization of emissions for the preceding twelve (12) months of the reporting period (January 1 through December 31.)

- (C) An installment fee payment is considered late and is subject to a surcharge if not received within ~~sixty (60)~~seventy five (75) days of the due date (~~July 1 or January 1 as applicable~~) pursuant to paragraph (e)(10).

(12) Fee Payment Subject to Validation

Acceptance of a fee payment does not constitute validation of the emission data.

(13) Exempt Compounds

Emissions of acetone, ethane, methyl acetate, parachlorobenzotrifluoride (PCBTF), and volatile methylated siloxanes (VMS), shall not be subject to the requirements of Rule 301(e).

(14) Reporting Emissions and Paying Fees

~~For the six-month reporting period of July 1, 2007~~January 1 through December 31, ~~2007 and calendar year 2008,~~ emission fees shall be determined in accordance with fee rates specified in Tables III, IV and V, and paragraph (e)(2). Installment fees that have been paid for Semi-Annual Emission Fees ~~by March 1, 2008~~ shall not be subject to this provision.

(15) Deadline for Filing Annual Emissions Report and Fee Payment

~~The deadline for filing annual emissions reports and fee payments is as follows:~~

Notwithstanding any other applicable Rule 301(e) provisions regarding the annual emissions report and emission fees, for the reporting period January 1 through December 31 of July 1, 2007 through December 31, 2007, the fee payment and the completed annual emissions report shall be received by the

District, or postmarked, on or before ~~September 1, 2008~~ the seventy-fifth (75<sup>th</sup>) day following January 1 of the subsequent year to avoid any late payment surcharges specified in subparagraph (e)(10)(B), ~~or~~

(A) ~~— The deadline for filing the calendar year 2008 Annual Emissions Report and fee payment shall be March 2<sup>nd</sup>, 2009. For any facility that is subject to the Regulation for the Mandatory Reporting of Greenhouse Gas (GHG) emissions adopted by the CARB on December 6, 2007, or subsequent revisions that voluntarily elects to report the GHG emissions to the District in the manner prescribed by the Executive Officer, the deadline for filing Annual Emissions Reports and fee payments shall coincide with the deadlines set forth in the Regulation for the Mandatory Reporting of GHG emissions adopted by the CARB on December 6, 2007, or subsequent revisions.~~

(16) Reporting GHG Emissions and Paying Fees

A facility that is subject to the California Air Resources Board (CARB)'s mandatory reporting of Greenhouse Gas (GHG) emissions may request District staff to review and verify the facility's GHG emissions. The fee for review and verification for each GHG emissions report shall consist of an initial submittal fee of ~~\$128.14~~ \$131.31 in addition to a verification fee assessed at ~~\$132.59~~ \$135.90 per hour or prorated portion thereof.

(f) Certified Permit Copies and Reissued Permits

A request for a certified permit copy shall be made in writing by the permittee after the destruction, loss, or defacement of a permit. A request for a permit to be reissued shall be made in writing by the permittee where there is a name or address change without a change of operator or location. The permittee shall, at the time a written request is submitted, pay the fees to cover the cost of the certified permit copy or reissued permit as follows:

(1) ~~A fee of \$26.34 shall be paid for a eCertified pPermit eCopy:~~

<u>Facility Type</u>	<u>Non-Title V</u>	<u>Title V</u>
<u>FY 2017 -18</u>	<u>\$28.08</u>	<u>\$31.32</u>
<u>FY 2018-19 and thereafter</u>	<u>\$29.20</u>	<u>\$36.33</u>

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- (2) Reissued Permit ~~A fee of \$203.93 shall be paid for a reissued permit.~~

<u>Facility Type</u>	<u>Non-Title V</u>	<u>Title V</u>
<u>FY 2017 -18</u>	<u>\$217.39</u>	<u>\$242.47</u>
<u>FY 2018-19 and thereafter</u>	<u>\$226.08</u>	<u>\$281.27</u>

No fee shall be assessed to reissue a permit to correct an administrative error by District staff.

- (g) Reinstating Expired Applications or Permits; Surcharge

An application or a Permit to Operate which has expired due to nonpayment of fees or court judgments in favor of the District or administrative civil penalties associated with the facility may be reinstated by submitting a request for reinstatement of the application or Permit to Operate accompanied by a reinstatement surcharge and payment in full of the amount of monies due at the time the application or Permit to Operate expired. The reinstatement surcharge shall be fifty percent (50%) of the amount of fees due per equipment at the time the application or Permit to Operate expired, or the following amount, whichever is lower:

<u>Title V Facility Permit Holders</u>	<u>\$257.25 for FY 2017-18 and \$298.41 for FY 2018-19 and thereafter per equipment</u>
<u>Non-Title V Facility Permit Holders</u>	<u>\$216.36230.64 for FY 2017-18 and \$239.87 for FY 2018-19 and thereafter per equipment</u>
<u>Other Permit Holders</u>	<u>\$216.36 230.64 for FY 2017-18 and \$239.87 for FY 2018-19 and thereafter per equipment</u>

Such request and payment shall be made within one (1) year of the date of expiration. An application or Permit to Operate which has expired due to nonpayment of fees shall not be reinstated if the affected equipment has been altered since the expiration of the application or Permit to Operate. If the period of expiration has exceeded one (1) year or the affected equipment has been altered, operation of the equipment shall require a new Permit to Operate and the application shall be subject to Rule 1313(b).

- (h) Reinstating Revoked Permits

If a Permit to Operate is revoked for nonpayment of annual permit fees based on emissions or fees on non-permitted emissions, it may be reinstated upon payment by the permit holder of such overdue fees and accrued surcharge in accordance with (e)(9).

(i) Clean Air Act Non-Attainment Fees

Any fees remitted to the District pursuant to Rule 317 – Clean Air Act Non-attainment Fees shall be held in escrow accounts unique to each source. Fees accrued in such escrow accounts may be used for either of the following at the discretion of the source's owner or operator.

- (1) Creditable up to the amount of fees due by the same source during the calendar year or subsequent calendar year(s) for annual emissions fees due pursuant to Rule 301(e)(2), (4), (6), (7) and (11) and annual operating permit renewal fees due pursuant to Rule 301(d)(1), (2) and (4). In no case shall the credit be greater than the fees paid; or
- (2) ~~#~~Use by the owner or operator for VOC and NOx reduction programs at their source that are surplus to the State Implementation Plan according to the following prioritization:
  - (A) at the source; or
  - (B) use within another facility under common ownership; or
  - (C) use in the community adjacent to the facility; or
  - (D) other uses to reduce emissions.

Up to five percent of funds can be used by the South Coast Air Quality Management District for administrative support for items in paragraph (i)(2).

(j) Special Permit Processing Fees - California Environmental Quality Act (CEQA) Assistance, Air Quality Analysis, Health Risk Assessment, and Public Notice ~~on~~ Significant for Projects

(1) Payment for CEQA Assistance

(A) CEQA Document Preparation

When a determination is made by the Executive Officer that the District is the Lead Agency for a project, pursuant to the California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et seq. and state CEQA Guidelines (14 California Code of Regulations section 15000 et seq.), the project applicant may be required to pay a review fee (based on a staff rate of ~~\$162.29~~

166.35 per hour) when a 400-CEQA form requires the CEQA staff to review for CEQA applicability. If preparation of CEQA documentation is deemed necessary, the applicant shall pay an initial fee for the preparation of necessary CEQA documentation according to the following schedule:

Notice of Exemption (upon applicant request)	<del>-\$324.58</del> <u>332.69</u>
Negative Declaration	<del>-\$4,894.54</del> <u>5,016.90</u>
Mitigated Negative Declaration	<del>-\$4,894.54</del> <u>5,016.90</u>
Environmental Impact Report (EIR)	<del>-\$6,526.00</del> <u>6,689.15</u>
Supplemental or Subsequent EIR	<del>-\$6,526.00</del> <u>6,689.15</u>
Addendum to EIR	<del>-\$3,382.14</del> <u>3,466.69</u>

If the Executive Officer determines that the District's CEQA preparation costs (may include, but not limited to, mailing, noticing, publications, et cetera) and staff time (based on the rate of ~~\$162.29~~ 166.35 per hour) exceed the initial fee the project applicant, upon notification from the District, shall make periodic payment of the balance due. The Executive Officer shall determine the amount and timing of such periodic payments, based upon the level of CEQA analysis and the amount of monies needed to offset the actual preparation costs.

(B) CEQA Document Assistance

When the District is not the Lead Agency for a project and a request is made by: another public agency; a project proponent; or any third party, for staff assistance with any of the following tasks including, but not limited to: reviewing all or portions of a CEQA document and air quality analysis protocols for emissions inventories and air dispersion modeling prior to its circulation to the public for review pursuant to Public Resources Code §21092; assisting lead agencies with developing and implementing mitigation measures, the requestor may be required to pay a fee for staff time at the rate of ~~\$162.29~~166.35 per hour. This fee shall not apply to review of CEQA documents prepared by other public agencies that are

available for public review pursuant to Public Resources Code §21092 and is part of the District's intergovernmental review responsibilities under CEQA.

(2) **Payment for Air Quality Analysis**

When a determination is made by the Executive Officer that an air quality analysis of the emissions from any source is necessary to predict the extent and amount of air quality impact prior to issuance of a permit, the Executive Officer may order air quality simulation modeling by qualified District personnel. Alternatively, the Executive Officer may require (or the owner/operator of the source may elect) that modeling be performed by the owner/operator or an independent consultant.

Where modeling is performed by the owner/operator or an independent consultant, the Executive Officer may require that the results be verified by qualified District personnel. The owner/operator of the source shall provide to the Executive Officer a copy of the final modeling report including all input data, description of methods, analyses, and results. The owner/operator of the source modeled by District personnel shall pay a fee as specified in Table IIA to cover the costs of the modeling analysis. A fee, as specified in Table IIA, shall be charged to offset the cost of District verification of modeling performed by an independent consultant.

(3) **Payment for Health Risk Assessment**

(A) When a determination is made by the Executive Officer that any source being evaluated for a Permit to Construct or a Permit to Operate may emit toxic or potentially toxic air contaminants, the Executive Officer may order a Health Risk Assessment be conducted by qualified District personnel or by a qualified consultant, as determined by the Executive Officer, engaged by the District under a contract. Alternatively, the Executive Officer may require (or owner/operator of the source may elect) that the assessment be performed by the owner/operator or an independent consultant engaged by the owner/operator. The Health Risk Assessment shall be performed pursuant to methods used by the California EPA's Office of Environmental Health Hazard Assessment.

(B) For a Health Risk Assessment conducted by the owner/operator of the source or the owner/operator's consultant, the Executive Officer

may require that the results be verified by qualified District personnel or by a qualified consultant engaged by the District. The owner/operator of the source shall provide to the Executive Officer a copy of the final Health Risk Assessment including all input data, and description of methods, analyses, and results. The owner/operator of the source for which a Health Risk Assessment is conducted or is evaluated and verified by District personnel or consultant shall pay the fees specified in Table IIA to cover the costs of an Air Quality Analysis and Health Risk Assessment analysis, evaluation, or verification. When the Health Risk Assessment is conducted or is evaluated and verified by a consultant engaged by the District, or District personnel, the fees charged will be in addition to all other fees required.

- (C) When a Health Risk Assessment is evaluated by the California EPA, pursuant to Health and Safety Code Sections 42315, 44360, 44361 or 44380.5, or by a consultant engaged by the California EPA, or when the District consults with the California EPA regarding the Health Risk Assessment, any fees charged by the California EPA to the District will be charged to the person whose Health Risk Assessment is subject to the review, in addition to other fees required.

(4) Payment for Public Notice

An applicant for a ~~significant~~ project requiring public notification, as defined in Rule 212(e) shall pay the applicable fee, for preparation of the notice as required by the rules, as shown below in this paragraph:

<u>Public Notification Type</u>	<u>Non-Title V Source</u>	<u>Title V Source</u>
<u>For emission reduction credits (ERCs) in excess of the amounts as specified in Rule 1310(c)</u>	<u>\$1,008.50 for FY 2017-18 and \$1,048.84 for FY 2018-19 and thereafter</u>	<u>\$1,124.87 for FY 2017-18 and \$1,304.85 for FY 2018-19 and thereafter</u>
<u>Requesting allocations from the Offset Budget or requesting the</u>	<u>\$1,008.50 for FY 2017-18</u>	<u>\$1,124.87 for FY 2017-18</u>



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<u>generation or use of any Short Term Credit (STCs)</u>	<u>and</u> <u>\$1,048.84 for</u> <u>FY 2018-19</u> <u>and thereafter</u>	<u>and</u> <u>\$1,304.85 for</u> <u>FY 2018-19</u> <u>and thereafter</u>
<u>Significant revision of a Title V permit</u>	<u>---</u>	<u>\$1,124.87 for</u> <u>FY 2017-18</u> <u>and</u> <u>\$1,304.85 for</u> <u>FY 2018-19</u> <u>and thereafter</u>

~~or for emission reduction credits (ERCs) in excess of the amounts as specified in Rule 1310(c), or the operator of a facility requesting allocations from the Offset Budget or requesting the generation or use of any Short Term Credit (STCs), or for significant permit revision of a Title V permit shall be assessed a fee of \$946.06 for preparation of the notice required by the rules.~~ The notice preparation fee is waived for existing dry cleaning operations at the same facility that install, modify or replace dry cleaning equipment to comply with Rule 1421 provided there is a concurrent removal from service of the perchloroethylene equipment. Eligibility includes converting from perchloroethylene to non-toxic alternative solvents, including non-toxic hydrocarbon solvents. In addition, an applicant for a project subject to the requirements of Rule 212(g) shall either:

- (A) ~~Pay~~ Pay a fee, as specified in Table IIB, for publication of the notice by prominent advertisement in the newspaper of general circulation in the area affected where the facility is located and for the mailing of the notice to persons identified in Rule 212(g), or
- (B) ~~Arrange~~ Arrange publication of the above notice independent of the District option. This notice must be by prominent advertisement in the newspaper of general circulation in the area affected where the facility is located. Where publication is performed by the owner/operator or an independent consultant, the owner/operator of the source shall provide to the Executive Officer a copy of the proof of publication.

- (5) Payment for Review of Continuous Emissions Monitoring System (CEMS), Fuel Sulfur Monitoring System (FSMS), and Alternative Continuous Emissions Monitoring System (ACEMS)

- (A) New Application for Process Equipment Requiring CEMS or, Alternatively, an FSMS or ACEMS to Comply with the CEMS Requirement<sub>2</sub>

When a determination is made by the Executive Officer that a Continuous Emissions Monitoring System (CEMS) is required in order to determine a source's compliance with a District rule or regulation, the applicant shall:

- (i) Apply for the use of a CEMS and pay a basic processing fee as specified in Table IIC at the time of filing.
- (ii) Apply for the use of an FSMS or ACEMS in lieu of a CEMS and pay a basic processing fee as specified in Table IIC at the time of filing.

- (B) Modification of an Existing Certified CEMS, FSMS, or ACEMS

If a certified CEMS, FSMS, or ACEMS is modified in a manner (excluding routine replacement or servicing of CEMS or FSMS components for preventive or periodic maintenance according to established quality assurance guidelines, or CEMS or FSMS components designated by the Executive Officer as "standardized" or direct replacement-type components) determined by the Executive Officer to compromise a source's compliance with a District rule or regulation, the applicant shall pay a processing fee covering the evaluation of the modification and recertification, if necessary, as follows:

- (i) If one or more CEMS or FSMS components (excluding additional pollutant monitors) are replaced, modified, or added, the applicant shall pay a minimum processing fee of ~~\$866.02~~\$887.67; and additional fees will be assessed at a rate of ~~\$162.29~~\$166.35 per hour for time spent on the evaluation in excess of 10 hours up to a maximum total fee of ~~\$5,414.44~~\$5,490.80.
- (ii) If one or more pollutant monitors are added to a CEMS or FSMS (and one or more of its components are concurrently replaced, modified, or added), the applicant shall pay a

minimum processing fee as specified in Table IIC, based on the number of CEMS or FSMS pollutant monitors and components added.

- (iii) If one or more pollutant emission sources at a facility are added to an FSMS, a time-shared CEMS, or a SO<sub>x</sub> CEMS which is specifically used to “back-calculate” fuel sulfur content for these sources, the applicant shall pay a minimum processing fee as specified in Table IIC, based on the number of CEMS or FSMS monitors and components added.
- (iv) If one or more ACEMS (or PEMS) components are replaced, modified, or added, the applicant shall pay a minimum processing fee ~~\$866.02~~877.67; and additional fees will be assessed at a rate of ~~\$162.29~~166.35 per hour for time spent on the evaluation in excess of 10 hours up to a maximum total fee of ~~\$5,414.44~~5,549.80.

- (C) **Modification of CEMS, FSMS, or ACEMS Monitored Equipment**  
For any RECLAIM or non-RECLAIM equipment monitored or required to be monitored by a CEMS, FSMS, or ACEMS, that is modified in a manner determined by the Executive Officer to compromise a source’s compliance with a District CEMS-, FSMS-, or ACEMS-related rule or regulation, or requires an engineering evaluation, or causes a change in emissions; the applicant shall pay a minimum processing fee of ~~\$866.02~~877.67, covering the evaluation and recertification, if necessary, of the CEMS, FSMS, or ACEMS. Additional fees will be assessed at a rate of ~~\$162.29~~166.35 per hour for time spent on the evaluation in excess of 10 hours up to a maximum total fee of ~~\$5,414.44~~5,549.80.

- (D) **Periodic Assessment of an Existing RECLAIM CEMS, FSMS, or ACEMS**

An existing RECLAIM CEMS, FSMS, or ACEMS, which undergoes certification as in (i)(5)(A), must be retested on a quarterly, semi-annual, or annual basis to remain in compliance with District Regulation XX. The applicant shall pay a minimum processing fee of ~~\$866.02~~877.67 for this evaluation, if required. Additional fees will be assessed at a rate of ~~\$162.29~~166.35 per hour

for time spent on the evaluation in excess of 10 hours up to a maximum total fee of ~~\$5,414.44~~5,549.80.

(E) CEMS, FSMS, or ACEMS Change of Ownership

Every applicant who files an application for a change of operator of a RECLAIM or non-RECLAIM facility permit shall also file an application for a change of operator of a CEMS, FSMS, or ACEMS, if applicable, and be subject to a processing fee equal to ~~\$258.46~~264.61 for the first CEMS, FSMS, or ACEMS, plus ~~\$51.49~~52.78 for each additional CEMS, FSMS, or ACEMS.

(6) Payment for Review and Certification of Barbecue Charcoal Igniter Products

(A) Certification of Barbecue Charcoal Igniter Products

Pursuant to the requirements of District Rule 1174, manufacturers, distributors, and/or retailers of applicable barbecue charcoal igniter products shall perform the required testing and shall submit a formal report for review by SCAQMD staff for product compliance and certification. For each product evaluated, the applicant shall pay a minimum processing fee of ~~\$640.46~~656.47 per product certified, and additional fees will be assessed at the rate of ~~\$128.44~~131.31 per hour for time spent on the evaluation/certification process in excess of 5 hours.

(B) Repackaging of Certified Barbecue Charcoal Igniter Products

When a currently certified barbecue charcoal igniter product is repackaged for resale or redistribution, the manufacturer, distributor, and/or retailer shall submit the required documentation to SCAQMD staff for evaluation and approval. For each product or products evaluated, the applicant shall pay a processing fee of ~~\$320.25~~328.26 for the first certificate issued, and additional fees will be assessed at the rate of ~~\$128.44~~131.31 per hour for the time spent in excess of 3 hours for the first certificate issued. Additional certificates for the same product or products shall be assessed at the rate of ~~\$64.02~~65.62 per each additional certificate issued.

(7) Fees for Inter-basin, Inter-district, or Interpollutant Transfers of Emission Reduction Credits

**Proposed Amended Rule 301 (Cont.) (Updated July 1, 2016 Amended June 2, 2017)**

An applicant for inter-basin, inter-district, or interpollutant transfer of ERCs shall file an application for ERC Change of Title and pay fees as listed in the Summary ERC Processing Rates – Banking, Change of Title, Alteration/Modification Table. Additional fees shall be assessed at a rate of ~~\$162.29 per~~based on the number of hours for the time spent on review and evaluation of inter-basin, inter-district, and interpollutant transfers of ERCs pursuant to Rule 1309 subdivisions (g) and (h).

<u>Facility Type</u>	<u>Non-Title V</u>	<u>Title V</u>
<u>FY 2017 -18</u>	<u>\$173/hr</u>	<u>\$192.96/hr</u>
<u>FY 2018-19 and thereafter</u>	<u>\$179.92/hr</u>	<u>\$223.83</u>

- (8) Fees for Grid Search to Identify Hazardous Air Pollutant Emitting Facilities  
A fee of ~~\$322.44~~\$330.50 shall be submitted by any individual, business or agency requesting the District to conduct a grid search to identify all facilities with the potential to emit hazardous air pollutants located within one-quarter mile of a proposed school boundary.

Failure to pay the fees described in this subdivision within thirty (30) days after their due date(s) shall result in expiration of pending applications, and no further applications will be accepted from the applicant until the fees have been paid in full.

(k) Government Agencies

All applicants and permittees, including federal, state, or local governmental agencies or public districts, shall pay all fees.

(l) RECLAIM Facilities

- (1) For RECLAIM facilities, this subdivision specifies additional conditions and procedures for assessing the following fees:

- (A) Facility Permit;
- (B) Facility Permit Amendment;
- (C) Change of Operating Condition;
- (D) Change of Operator;
- (E) Annual Operating Permit;
- (F) Transaction Registration;
- (G) RECLAIM Pollutant Emission;

- (H) Duplicate Permits;
  - (I) Reissued Permits;
  - (J) RECLAIM Breakdown Emissions; and
  - (K) Non-Tradeable Allocation Credit Mitigations.
- (2) RECLAIM Fees Applicability
- All RECLAIM Facility Permit holders shall be subject to this subdivision.
- (3) Rule 301 - Permit Fees Applicability
- Unless specifically stated, all RECLAIM Facility Permit holders shall be subject to all other provisions of Rule 301 - Permit Fees.
- (4) Facility Permit Fees
- (A) Existing facilities entering the RECLAIM program after initial implementation of the RECLAIM program will pay 10 percent of the sum of the permit processing fees from the Summary Permit Fee Rates tables for each equipment merged into the Facility Permit, with a minimum fee of ~~\$541.10~~ as shown in the following table below in this subparagraph:-

<u>Facility Type</u> <u>Permit</u> <u>Amendment Fee</u>	<u>FY 2017-18</u>	<u>FY 2018-19</u> <u>and thereafter</u>
<u>Non-Title V</u>	<u>\$576.81</u>	<u>\$599.88</u>
<u>Title V</u>	<u>\$643.37</u>	<u>\$746.31</u>

- (B) New facilities with new equipment entering the RECLAIM program will pay a Facility Permit Fee equal to the sum total of the permit processing fees from the Summary Permit Fee Rates tables for each equipment merged into the Facility Permit.
- (5) Facility Permit Amendment
- At the time of filing an application for a Facility Permit Amendment, a Facility Permit Amendment Fee shall be paid and an application for such amendment shall be submitted. The Facility Permit Amendment Fee for an application that requires an engineering evaluation or causes a change in emissions shall be ~~\$1,021.20 (\$2,042.42 if both RECLAIM and Title V facility)~~ based on the type of facility permit as follows:

**Proposed Amended Rule 301 (Cont.) (Updated July 1, 2016 Amended June 2, 2017)**

<u>Facility Permit Amendment Fee</u>	<u>FY 2017-18</u>	<u>FY 2018-19 and thereafter</u>
<u>RECLAIM</u>	<u>\$1,088.60</u>	<u>\$1,132.14</u>
<u>Title V</u>	<u>\$1,214.21</u>	<u>\$1,408.48</u>
<u>RECLAIM &amp; Title V</u>	<u>\$2,302.81</u>	<u>\$2,540.62</u>

plus the sum of applicable fees assessed for each application required for affected equipment as specified in the Summary Permit Fee Rate tables. The Facility Permit Amendment Fee for an application that does not require an engineering evaluation or causes a change in emissions shall be based on the type of facility permit as follows: ~~\$1,021.20 (\$2,042.42 if both a RECLAIM and Title V facility)~~

<u>Facility Permit Amendment Fee</u>	<u>FY 2017-18</u>	<u>FY 2018-19 and thereafter</u>
<u>RECLAIM</u>	<u>\$1,088.60</u>	<u>\$1,132.14</u>
<u>Title V</u>	<u>\$1,214.21</u>	<u>\$1,408.48</u>
<u>RECLAIM &amp; Title V</u>	<u>\$2,302.81</u>	<u>\$2,540.62</u>

plus the applicable administrative permit change fee based on the equipment schedule as set forth in Rule 301(c)(3)(C) for each application required for affected equipment. All delinquent fees, court judgments in favor of the District and administrative civil penalties associated with the facility must be paid before a Facility Permit Amendment application will be accepted.

(6) **Change of Operating Condition**

At the time of filing an application for a Change of Operating Conditions that requires engineering evaluation or causes a change in emissions, a Change of Condition Fee shall be paid. Such fee shall be equal to the sum of fees assessed for each equipment subject to the change of condition as specified in the Summary Permit Fee Rates – Permit Processing, Change of Conditions, Alteration/Modification table and in the Summary ERC Processing Rates – Banking, Change of Title, Alteration/Modification table. All delinquent fees associated with the affected facility subject to the change

of condition must be paid before a Change of Operating Conditions application will be accepted.

(7) Fee for Change of Operator

The Permit Processing Fee for a Change of Operator of a RECLAIM facility permit shall be determined from the Table Summary of Permit Fee Rates – Change of Operator, Non-Small Business. In addition, a Facility Permit Amendment fee as specified in paragraph (1)(5) shall be assessed. All fees, billed within the past 3 years from the date of application submittal that are, associated with the facility for equipment for which a Change of Operator or Additional Operator application is filed, and all facility-specific fees (such as “Hot Spots” fees), must be paid before a Change of Operator or Additional Operator application is accepted. If after an application is received and SCAQMD determines that fees are due, the new operator shall pay such fees within 30 days of notification. If the fees are paid timely the new operator will not be billed for any additional fees billed to the previous operator.

(8) Annual Operating Permit Renewal Fee

(A) Unless otherwise stated within this subdivision, the Facility Permit holder shall be subject to all terms and conditions pursuant to subdivision (d).

(B) An Annual Operating Permit Renewal Fee shall be submitted by the end of the compliance year. Such fee shall be equal to the sum of applicable permit renewal fees specified in paragraph (d)(2).

(C) At least thirty (30) days before the annual renewal date, the owner/operator of equipment under permit will be notified by mail of the amount to be paid and the due date. If such notice is not received at least thirty (30) days before the annual renewal date, the owner/operator of equipment under permit shall notify the District on or before the permit renewal date that said notice was not received. If the Annual Operating Permit Renewal fee is not paid within thirty (30) days after the due date, the permit will expire and no longer be valid. In such a case, the owner/operator will be notified by mail of the expiration and the consequences of operating equipment without a valid permit as required by District Rule 203 (Permit to Operate). For the purpose of this subparagraph, the fee payment will be considered to be received by the District if it is



postmarked by the United States Post Office on or before the expiration date stated on the billing notice. If the expiration date falls on a Saturday, Sunday, or a state holiday, the fee payment may be postmarked on the next business day following the Saturday, Sunday, or state holiday as if it had been postmarked on the expiration date.

(9) Transaction Registration Fee

The transferor and transferee of an RTC shall jointly register the transaction with the District pursuant to District Rule 2007 – Trading Requirements. At the time the transaction is registered with the District, The transferee shall pay a Transaction Registration Fee as shown in the following table below in this paragraph: of \$152.98 at the time the transaction is registered with the District.

<u>Facility Registration Fee</u>	<u>FY 2017-18</u>	<u>FY 2018-19 and thereafter</u>
<u>Non-Title V</u>	<u>\$163.08</u>	<u>\$169.60</u>
<u>Title V</u>	<u>\$181.89</u>	<u>\$210.99</u>

(10) RECLAIM Pollutant Emission Fee

At the end of the reporting period specified in subparagraph (e)(8)(B), RECLAIM facilities shall pay a RECLAIM Pollutant Emission Fee based on the facilities' total certified RECLAIM pollutant emissions. For facilities emitting ten (10) tons per year or more of any contaminant the previous year, the Facility Permit holders shall pay a semi-annual installment equal to one half (1/2) of the total estimated fee with final balance due at the end of the reporting period.

- (A) The Facility Permit Holder shall pay emission fees according to the provisions of subdivision (e) for all emissions that are not accounted for with RECLAIM pollutant emissions. The Facility Permit holder shall add non-RECLAIM emissions to applicable RECLAIM emissions to determine the appropriate fee rate from Table III fee rate per ton of emissions.
- (B) Facility Permit Holders shall pay RECLAIM Pollutant Emission Fees according to the provisions of subdivision (e), except that:

- (i) Fees based on emissions of RECLAIM pollutants as defined in Rule 2000(c)(58) for annual payments shall be calculated based on certified emissions as required by paragraph (b)(2) or (b)(4) of Rule 2004, as applicable;
  - (ii) RECLAIM Pollutant Emission Fees shall be due as established by subdivision (e) of this rule for both Cycle 1 and Cycle 2 Facilities;
  - (iii) Facilities emitting ten (10) tons per year or more of a RECLAIM pollutant during the previous annual reporting period, shall also pay a semi-annual installment based on either (a) one-half (1/2) of the facility's RECLAIM pollutant fees for the previous annual reporting period; or (b) emissions certified pursuant to paragraph (b)(2) and (b)(4) of Rule 2004 in the two (2) quarters falling in the time period that coincides with the first six (6) months of the current reporting period, by the deadline as —established by subdivision (e) of this rule for both Cycle 1 and Cycle 2 Facilities.
  - (iv) A fee payment is considered late and subject to the late payment surcharge of paragraph (e)(10) if not received within sixty (60) days of the due date specified in this paragraph.
- (C) If the Executive Officer determines that the APEP emissions reported by a Facility Permit Holder are less than the amount calculated as specified in Rule 2004(b)(2) and (b)(4), the Facility Permit Holder shall pay RECLAIM Pollutant Emission Fees on the difference between the APEP total as determined by the Executive Officer and the reported APEP total as specified in subparagraph (l)(10)(A).
- (D) In the event that certified emissions determined pursuant to Rule 2004(b)(2) and (b)(4), for compliance year beginning January 1, 1995 and after, include emissions calculated using missing data procedures, and these procedures were triggered pursuant to Rule 2011(c)(3) or 2012(c)(3) solely by a failure to electronically report emissions for major sources due to a problem with transmitting the emission data to the District which was beyond the control of the

Facility Permit holder, such portion of the emissions may be substituted by valid emission data monitored and recorded by a certified CEMS, for the purpose of RECLAIM pollutant emission fee determination only, provided that a petition is submitted to the Executive Officer with the appropriate processing fee by the Facility Permit holder. The petition must be made in writing and include all relevant data to clearly demonstrate that the valid emission data were recorded and monitored by a certified CEMS as required by Rules 2011 and 2012 and the only reason for missing data procedures being triggered was due to a problem with transmitting the emission data to the District which was beyond the control of the Facility Permit holder. In addition to the RECLAIM pollutant emission fee, the petitioner shall pay a minimum processing fee of ~~\$632.78~~as shown in the following table in this subparagraph: ~~and additional fees will be assessed at a rate of \$162.29 per hour for time spent on evaluation in excess of 3 hours.~~

<u>Facility Type</u>	<u>FY 2017-18</u>	<u>FY 2018-19 and thereafter</u>
<u>Non-Title V</u>	<u>\$674.54</u>	<u>\$701.52</u>
<u>Title V</u>	<u>\$752.38</u>	<u>\$872.76</u>

~~and an additional fee assessed at the applicable hourly rate, for time spent on evaluation in excess of 3 hours, as shown in the table below in this subparagraph:~~

<u>Facility Type (After 3 hours)</u>	<u>FY 2017-18</u>	<u>FY 2018-19 and thereafter</u>
<u>Non-Title V</u>	<u>\$173/hr</u>	<u>\$179.92/hr</u>
<u>Title V</u>	<u>\$192.96/hr</u>	<u>\$223.83/hr</u>

~~(E) — The Executive Officer may establish a special operating fee for petroleum refineries (Standard Industrial Classification No. 2911) up to an amount based on \$0.07 per pound in FY 07-08 and \$0.07 per pound in FY 08-09 of the initial SO<sub>x</sub> RECLAIM allocation (initial allocation of the original operator if a change of operator has~~

occurred since the assignment of the initial allocation) to cover the cost of a technology assessment to reduce SOx emissions from the RECLAIM universe. Fee payment is due upon notification by the Executive Officer. If the fee payment is not received by the sixtieth (60<sup>th</sup>) day following the due date a surcharge shall be added to the original amount according to the schedule in subparagraph (e)(10)(B).

(11) Certified Permits Copies

A request for a certified copy of a Facility Permit shall be made in writing by the permittee. The permittee shall, at the time the written request is submitted, pay a fee ~~\$26.34~~ for the first page as follows:

<u>Facility Type</u> <del><u>Permit</u></del> <u>Amendment Fee</u>	<u>FY 2017-18</u>	<u>FY 2018-19</u> <u>and thereafter</u>
<u>Non-Title V</u>	<u>\$28.08</u>	<u>\$29.20</u>
<u>Title V</u>	<u>\$31.32</u>	<u>\$36.33</u>

and ~~\$1.86~~ the applicable fee per page for each additional page in the Facility Permit as shown below:-

<u>Facility Type</u> <del><u>Permit</u></del> <u>Amendment Fee</u>	<u>FY 2017-18</u>	<u>FY 2018-19</u> <u>and thereafter</u>
<u>Non-Title V</u>	<u>\$1.98/page</u>	<u>\$2.06/page</u>
<u>Title V</u>	<u>\$2.21/page</u>	<u>\$2.56/page</u>

(12) Reissued Permits

A request for a reissued Facility Permit shall be made in writing by the permittee where there is a name or address change without a change of operator or location. The permittee shall, at the time the written request is submitted, pay a fee ~~\$203.93~~ for the first page as follows:

<u>Facility Type</u> <del><u>Permit</u></del> <u>Amendment Fee</u>	<u>FY 2017-18</u>	<u>FY 2018-19</u> <u>and thereafter</u>
<u>Non-Title V</u>	<u>\$217.39</u>	<u>\$226.09</u>
<u>Title V</u>	<u>\$242.47</u>	<u>\$281.27</u>

and the applicable fee per page ~~1.86~~ for each additional page in the facility permit as shown below:

<u>Facility Type</u> <u>Permit</u> <u>Amendment Fee</u>	<u>FY 2017-18</u>	<u>FY 2018-19</u> <u>and thereafter</u>
<u>Non-Title V</u>	<u>\$1.98/page</u>	<u>\$2.06/page</u>
<u>Title V</u>	<u>\$2.21/page</u>	<u>\$2.56/page</u>

(13) Breakdown Emission Report Evaluation Fee

The Facility Permit Holder, submitting a Breakdown Emission Report to seek exclusion of excess emissions from the annual allocations pursuant to Rule 2004 - Requirements, shall pay fees for the evaluation of a Breakdown Emission Report. The Facility Permit Holder shall pay a filing fee of one (1) hour based on the fee rates shown in the table below in this paragraph. ~~of \$162.29~~ at the time of filing of a Breakdown Emission Report, and shall be assessed an evaluation fee at the hourly rate of \$162.29 per hour shown in the same table.

<u>Facility Type</u>	<u>Non-Title V</u>	<u>Title V</u>
<u>FY 2017 -18</u>	<u>\$173.00/hr</u>	<u>\$192.96/hr</u>
<u>FY 2018-19 and thereafter</u>	<u>\$179.92/hr</u>	<u>\$223.83/hr</u>

(14) Breakdown Emission Fee

At the end of the time period from July 1 through June 30, the Facility Permit holder shall pay a Breakdown Emission Fee for excess emissions determined pursuant to District Rule 2004 - Requirements. The Facility Permit Holder shall include excess emissions to the total certified RECLAIM emissions to determine the appropriate RECLAIM Pollutant Emission Fee.

(15) Mitigation of Non-Tradeable Allocation Credits

**Proposed Amended Rule 301 (Cont.) (Updated July 1, 2016 Amended June 2, 2017))**

Upon submitting a request to activate non-tradeable allocation credits pursuant to District Rule 2002(h), the RECLAIM Facility Permit Holder shall pay a mitigation fee per ton of credits requested as shown below:ef

<u>Facility Type</u> <u>Permit</u> <u>Amendment Fee</u>	<u>FY 2017-18</u>	<u>FY 2018-19</u> <u>and thereafter</u>
<u>Non-Title V</u>	<u>\$11,544.44/ton</u>	<u>\$12,006.22/ton</u>
<u>Title V</u>	<u>\$12,876.49/ton</u>	<u>\$14,936.73/ton</u>

~~\$10,829.68~~ plus a non-refundable ~~\$107.95~~processing fee as shown below:-

<u>Facility Type</u> <u>Permit</u> <u>Amendment Fee</u>	<u>FY 2017-18</u>	<u>FY 2018-19</u> <u>and thereafter</u>
<u>Non-Title V</u>	<u>\$115.07</u>	<u>\$119.67</u>
<u>Title V</u>	<u>\$128.35</u>	<u>\$148.89</u>

- (16) Evaluation Fee to Increase an Annual Allocation to a Level Greater than a Facility's Starting Allocation Plus Non-Tradable Credits

The Facility Permit Holder submitting an application to increase an annual Allocation to a level greater than the facility's starting allocation plus non-tradeable credits pursuant to Rule 2005 - New Source Review shall pay fees for the evaluation of the required demonstration specified in Rule 2005(c)(3). The Facility Permit Holder shall pay an evaluation fee at the applicable hourly rate of \$162.29 per houras shown in the table below:-

<u>Facility Type</u> <u>Permit</u> <u>Amendment Fee</u>	<u>FY 2017-18</u>	<u>FY 2018-19</u> <u>and thereafter</u>
<u>Non-Title V</u>	<u>\$173.00/hr</u>	<u>\$179.92/ton</u>
<u>Title V</u>	<u>\$192.96/ton</u>	<u>\$223.83/ton</u>

(m) Title V Facilities

(1) Applicability

The requirements of this subdivision apply only to facilities that are subject to the requirements of Regulation XXX - Title V Permits.

(2) Rule 301 Applicability

All Title V facilities shall be subject to all other provisions of Rule 301 - Permit Fees, except as provided for in this subdivision.

(3) Permit Processing Fees for Existing Facilities with Existing District Permits  
Applying for an Initial Title V Facility Permit

(A) The applicant shall pay the following initial fee when the application is submitted:

**Proposed Amended Rule 301 (Cont.) (~~Updated July 1, 2016~~Amended June 2, 2017)**

Title V INITIAL Fee				
Number of Devices	1-20	21-75	76-250	251+
<del>Applications submitted on or after July 1, 2005 through June 30, 2006</del>	\$1,219.43	\$3,902.58	\$8,781.18	\$14,879.43
<del>Applications submitted on or after July 1, 2006 through June 30, 2007</del>	\$1,341.39	\$4,292.85	\$9,659.32	\$16,367.36
<del>Applications submitted on or after July 1, 2007 through June 30, 2008</del>	\$1,475.51	\$4,722.14	\$10,625.23	\$17,994.61
Applications submitted on or after July 1, <del>2008-2017</del> <u>through June 30, 2018</u>	\$1,623.07 <u>1,929.83</u>	\$5,194.34 <u>6,176.07</u>	\$11,687.76 <u>13,896.75</u>	\$19,804.52 <u>23,547.57</u>
<u>Applications submitted on or after July 1, 2018</u>	<u>\$2,238.60</u>	<u>\$7,164.24</u>	<u>\$16,120.23</u>	<u>\$27,315.18</u>



**Proposed Amended Rule 301 (Cont.) (Updated July 1, 2016 Amended June 2, 2017))**

To determine the initial fee when the number of devices is not available, the applicant may substitute the number of active equipment. This fee will be adjusted when the Title V permit is issued and the correct number of devices are known.

- (B) The applicant shall, upon notification by the District of the amount due when the permit is issued, pay the following final fee based on the time spent on the application:

<b>Title V FINAL Fee</b>				
<b>Number of Devices</b>	<b>1-20</b>	<b>21-75</b>	<b>76-250</b>	<b>251+</b>
<b>Time Spent in Excess of:</b>	<b>8 Hours</b>	<b>30 Hours</b>	<b>70 Hours</b>	<b>120 Hours</b>
<b>On or after July 1, 2005 through June 30, 2006</b>	<del>\$121.93 per hour; up to a maximum total fee of \$14,885.68</del>	<del>\$121.93 per hour; up to a maximum total fee of \$29,771.34</del>	<del>\$121.93 per hour; up to a maximum total fee of \$73,309.10</del>	<del>\$121.93 per hour; up to a maximum total fee of \$111,642.50</del>
<b>On or after July 1, 2006 through June 30, 2007</b>	<del>\$134.12 per hour; up to a maximum total fee of \$16,374.26</del>	<del>\$134.12 per hour; up to a maximum total fee of \$32,748.46</del>	<del>\$134.12 per hour; up to a maximum total fee of \$81,871.14</del>	<del>\$134.12 per hour; up to a maximum total fee of \$145,539.83</del>

**Proposed Amended Rule 301 (Cont.) (Updated July 1, 2016 Amended June 2, 2017))**

<b><u>On or after July 1, 2007 through June 30, 2008</u></b>	<del>\$147.55</del> per hour; up to a maximum total fee of <del>\$18,011.66</del>	<del>\$147.55</del> per hour; up to a maximum total fee of <del>\$36,023.32</del>	<del>\$147.55</del> per hour; up to a maximum total fee of <del>\$90,058.25</del>	<del>\$147.55</del> per hour; up to a maximum total fee of <del>\$135,087.44</del>
<b><u>On or after July 1, 20082017 through June 30, 2018</u></b>	<del>\$162.29</del> <u>192.96</u> per hour; up to a maximum total fee of <del>\$19,812.83</del> <u>23,557.45</u>	<del>\$162.29</del> <u>192.96</u> per hour; up to a maximum total fee of <del>\$39,625.64</del> <u>47,114.89</u>	<del>\$162.29</del> <u>192.96</u> per hour; up to a maximum total fee of <del>\$101,434.77</del> <u>120,605.94</u>	<del>\$162.29</del> <u>192.96</u> per hour; up to a maximum total fee of <del>\$148,596.16</del> <u>176,680.83</u>
<b><u>On or after July 1, 2018</u></b>	<u>\$223.83</u> per hour; up to a maximum total fee of <u>\$27,326.64</u>	<u>\$223.83</u> per hour; up to a maximum total fee of <u>\$54,653.27</u>	<u>\$223.83</u> per hour; up to a maximum total fee of <u>\$139,902.89</u>	<u>\$223.83</u> per hour; up to a maximum total fee of <u>\$204,949.76</u>

For applicants that did not pay the correct initial fee based on the actual number of devices, the fee when the permit is issued shall be equal to the correct initial fee less the initial fee actually paid, plus the final fee.

Applications submitted on or prior to January 15, 1998 shall not be subject to the final fee.

- (C) If the facility requests revisions to the existing permit terms or conditions, including permit streamlining, an alternative operating scenario or a permit shield, the facility shall submit additional applications with the applicable fees in subdivisions (c) and (i) for each piece of equipment for which a revision is requested. Evaluation time spent on these additional applications shall be excluded from the time calculated for the billing for initial permit issuance in subparagraph (m)(3)(B).

(4) Permit Processing Fee Applicability

The permit processing fee for a new facility required to obtain a Title V facility permit to construct shall be the sum of all the applicable fees in subdivisions (c) and (i) for all equipment at the facility.

(5) Rule 301 Fee Applicability

The permit processing fee for a facility required to obtain a Title V facility permit because of a modification, pursuant to paragraph (c)(2) of Rule 301, shall be those specified in paragraph (m)(3) plus the sum of all the applicable fees in subdivisions (c) and (i) for all new and modified equipment at the facility.

(6) Administrative Permit Revision Fee

Notwithstanding paragraphs (l)(6), (l)(9), and (m)(3), and except as provided in paragraphs (l)(5), (l)(7), (l)(12), (m)(3), (m)(5) and (m)(8), the permit processing fee for an administrative permit revision shall be a fee of ~~\$1,021.20~~1,214.21 for FY2017-18 and ~~\$1,408.48~~ for FY2018-19 and thereafter.

(7) Permit Revision Fee

The permit processing fees for a minor permit revision, de minimis significant permit revision, or significant permit revision shall be ~~\$1,021.20~~1,214.21 for FY2017-18 and ~~\$1,408.48~~ for FY2018-19 and thereafter plus the applicable fee in paragraphs (l)(5), (l)(6), (m)(3), and (m)(4). RECLAIM facilities shall only pay the fee specified in paragraph (l)(5).

(8) Renewal Fees

The fees for renewal of a Title V Facility Permit, at the end of the term specified on the permit, shall be an initial processing fee of ~~\$2,319.52~~2,757.91 for FY2017-18 and ~~\$3,199.17~~ for FY2018-19 and thereafter to be paid when the application is submitted; and a final fee of ~~\$162.29~~192.96 for FY2017-18 and ~~\$223.84~~ for FY2018-19 and thereafter per hour for time spent on the application in excess of 8 hours, due upon notification by the District of the amount due when the permit is issued.

(9) Public Notice Fees

The holder of, or applicant for, a Title V permit shall either:

- (A) pay a fee, as specified in Table IIB, for publication of the notice by prominent advertisement in the newspaper of general circulation in

the area affected where the facility is located and for the mailing of the notice to persons identified in Rule 212(g), or

- (B) arrange publication of the above notice independent of the District option. This notice must be by prominent advertisement in the newspaper of general circulation in the area affected where the facility is located.

Where publication is performed by the owner/operator or an independent consultant, the owner/operator of the source shall provide to the Executive Officer a copy of the proof of publication.

(10) Public Hearing Fees

The holder of, or applicant for, a Title V permit shall, upon notification by the District of the amount due, pay fees of ~~\$3,248.71~~\$3,862.72 for FY2017-18 and \$4,480.75 for FY2018-19 and thereafter plus ~~\$1,040.07~~\$1,200.97 for FY2017-18 and \$1,393.13 for FY2018-19 and thereafter per hour for a public hearing held on a permit action.

(11) Application Cancellation

If a Title V permit application is canceled, the applicant shall pay, upon notification of the amount due, a final fee in accordance with this subdivision. The District shall refund the initial fee only if evaluation of the application has not been initiated.

(12) Notice of Amount Due and Effect of Nonpayment

For fees due upon notification, such notice may be given by personal service or by deposit, postpaid, in the United States mail and shall be due thirty (30) days from the date of personal service or mailing. For the purpose of this paragraph, the fee payment will be considered to be received by the District if it is postmarked by the United States Postal Service on or before the expiration date stated on the billing notice. If the expiration date falls on a Saturday, Sunday, or a state holiday, the fee payment may be postmarked on the next business day following the Saturday, Sunday, or the state holiday with the same effect as if it had been postmarked on the expiration date. Nonpayment of the fee within this period of time will result in permit expiration or revocation of the subject permit(s) in accordance with subdivision (f) of Rule 3002. No further applications will be accepted from the applicant until such time as overdue permit processing fees have been fully paid.

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(13) Exclusion Requests

The fees for requesting exclusion or exemption from the Title V program shall be calculated in accordance with Rule 306 – Plan Fees.

(n) All Facility Permit Holders

(1) Applicability

The requirements of this subdivision apply to all non-RECLAIM holders of a Facility Permit.

(2) Rule 301 Applicability

All non-RECLAIM Facility Permit holders or applicants shall be subject to all other provisions of Rule 301 - Permit Fees, except as provided for in this subdivision.

(3) Facility Permit Revision

Except as provided in paragraphs (m)(7) and (m)(8), the permit processing fee for an addition, alteration or revision to a Facility Permit that requires engineering evaluation or causes a change in emissions shall be the sum of applicable fees assessed for each affected equipment as specified in subdivisions (c) and (i).

(4) Change of Operating Condition

The permit processing fee for a Change of Operating Condition that requires engineering evaluation or causes a change in emissions shall be the sum of fees assessed for each equipment or process subject to the change of condition as specified in subdivisions (c) and (i).

(5) Fee for Change of Operator

The Permit Processing Fee for a Change of Operator of a facility permit shall be determined from the Table Summary of Permit Fee Rates – Change of Operator, Non-Small Business. In addition, an administrative permit revision fee, as shown in the table below in this paragraph ~~of \$1,021.20~~ shall be assessed.

<u>Facility Type</u>	<u>Non-Title V</u>	<u>Title V</u>
<u>FY 2017 -18</u>	<u>\$1,088.60</u>	<u>\$1,214.21</u>
<u>FY 2018-19 and thereafter</u>	<u>\$1,132.14</u>	<u>\$1,408.48</u>

All fees billed within the past 3 years from the date of application submittal that are associated with the facility for equipment for which a Change of

Operator or Additional Operator application is filed, and all facility specific fees (such as “Hot Spots” fees), must be paid before the Change of Operator or Additional Operator application is accepted. If after an application is received and SCAQMD determines that fees are due, the new operator shall pay such fees within 30 days of notification. If the fees are paid timely, the new operator will not be billed for any additional fees billed the previous operator.

- (6) Annual Operating Permit Renewal Fee
  - (A) Unless otherwise stated within this subdivision, the Facility Permit holder shall be subject to all terms and conditions pursuant to subdivision (d).
  - (B) An Annual Operating Permit Renewal Fee shall be submitted by the end of the compliance year. Such fee shall be equal to the sum of applicable annual operating permit renewal fees specified in paragraph (d)(2).
  - (C) At least thirty (30) days before the annual renewal date, the owner/operator of equipment under permit will be notified by mail of the amount to be paid and the due date. If such notice is not received at least thirty (30) days before the annual renewal date, the owner/operator of equipment under permit shall notify the District on or before the permit renewal date that said notice was not received. If the Annual Operating Permit Renewal Fee is not paid within thirty (30) days after the due date, the permit will expire and no longer be valid. In such a case, the owner/operator will be notified by mail of the expiration and the consequences of operating equipment without a valid permit as required by District Rule 203 (Permit to Operate). For the purpose of this subparagraph, the fee payment will be considered to be received by the District if it is postmarked by the United States Post Office on or before the expiration date stated on the billing notice. If the expiration date falls on a Saturday, Sunday, or a state holiday, the fee payment may be postmarked on the next business day following the Saturday, Sunday, or state holiday as if it had been postmarked on the expiration date.

(7) Certified Permit Copies

A request for a certified copy of a Facility Permit shall be made in writing by the permittee. The permittee shall, at the time a written request is submitted, pay ~~\$26.34~~27.00 for the first page and ~~\$1.91~~1.86 for each additional page in the facility permit.

(8) Reissued Permits

A request for a reissued Facility Permit shall be made in writing by the permittee where there is a name or address change without a change of operator or location. The permittee shall, at the time a written request is submitted, pay ~~\$203.93~~209.03 for the first page plus ~~\$1.86~~1.91 for each additional page in the Facility Permit.

(o) Asbestos Fees

Any person who is required by District Rule 1403 - Asbestos Emissions from Demolition/Renovation Activities to submit a written notice of intention to demolish or renovate shall pay at the time of delivery of notification, the Asbestos and Lead Fees specified in Table VI of this rule. Fees are per notification and multiple fees may apply. No notification shall be considered received pursuant to Rule 1403, unless it is accompanied by the required payment. Each revision of a notification shall require a payment of the Revision to Notification fee in Table VI. When a revision involves a change in project size, the person shall pay, in addition to the revision fee, the difference between the fee for the original project size and the revised project size according to Table VI. If the project size does not change for the revision, no additional fees based on project size shall be required. Revisions are not accepted for expired notifications.

For all requests of pre-approved Procedure 5 plans submitted in accordance with Rule 1403(d)(1)(D)(i)(V)(2), the person shall pay the full fee for the first evaluation and shall pay fifty percent (50%) of the applicable fee for each subsequent pre-approved Procedure 5 plan evaluation.

(p) Lead Abatement Notification Fees

A person who is required by a federal or District rule to submit written notice of intent to abate lead shall, at the time of delivery of notification, pay the appropriate renovation and abatement fee specified in Table VI of this rule. Fees are per notification and multiple fees may apply. No notification shall be considered received unless it is accompanied by the required payment. Each revision of a

notification shall require a payment of the Revision to Notification fee in Table VI. When a revision involves a change in project size, the person shall pay, in addition to the revision fee, the difference between the fee for the original project size and the revised project size according to Table VI. If the project size does not change for the revision, no additional fees based on project size shall be required. Revisions are not accepted for expired notifications.

(q) **NESHAP Evaluation Fee**

- (1) At the time of filing an application for a Change of Operating Conditions submitted solely to comply with the requirements of a NESHAP, a NESHAP Evaluation Fee shall be paid. The fee shall be ~~\$328.36~~**\$336.57**. Additional fees shall be assessed at a rate of ~~\$162.29~~**166.35** per hour for time spent in the evaluation in excess of two (2) hours, to a maximum total fee not to exceed the applicable Change of Conditions Fees listed for each affected piece of equipment as specified in the Summary Permit Fee Rates - Permit Processing, Change of Conditions, Alteration /Modification table and in the Summary ERC Processing Rates – Banking, Change of Title, Alteration/Modification table.
- (2) Payment of all applicable fees shall be due in thirty (30) days from the date of personal service or mailing of the notification of the amount due. Non-payment of the fees within this time period will result in expiration of the permit. For the purpose of this paragraph, the fee payment will be considered to be received by the District if it is postmarked by the United States Postal Service on or before the expiration date stated on the billing notice. If the expiration date falls on a Saturday, Sunday, or a state holiday, the fee payment may be postmarked on the business day following the Saturday, Sunday, or the state holiday, with the same effect as if it had been postmarked on the expiration date. No further applications will be accepted until such time as all overdue fees have been fully paid.

(r) **Fees for Certification of Clean Air Solvents**

Persons applying for Clean Air Solvent certification shall pay the following fee for each product to be certified:

Gas Chromatograph/Mass Spectrometry Analysis	<del>\$364.14</del> <b><u>\$373.24</u></b> for five or fewer compounds <del>\$33.79</del> <b><u>\$34.63</u></b> for each additional compound
Density measurement	<del>\$136.56</del> <b><u>139.97</u></b>



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Time and material	<del>\$128.11</del> <u>131.31</u> per person per hour or prorated portion thereof
Clean Air Solvent Certificate	<del>\$186.30</del> <u>190.96</u>

At the time of filing for a Clean Air Solvent certificate, the applicant shall submit a fee of ~~\$815.08~~835.46 for each product to be tested. Adjustments, including refunds or additional billings, shall be made to the submitted fee as necessary. A Clean Air Solvent Certificate shall be valid for five (5) years from the date of issuance and shall be renewed upon the determination of the Executive Officer that the product(s) containing a Clean Air Solvent continue(s) to meet Clean Air Solvent criteria, and has not been reformulated.

(s) Fees for Certification of Consumer Cleaning Products Used at Institutional and Commercial Facilities

Persons applying for certification of Consumer Cleaning Products Used at Institutional and Commercial Facilities shall pay the following fee for each product to be certified:

Gas Chromatograph/Mass Spectrometry Analysis	<del>\$364.14</del> <u>373.24</u> for five or fewer compounds <del>\$33.79</del> <u>34.63</u> for each additional compound
Time and material	<del>\$128.11</del> <u>131.31</u> per person per hour or prorated portion thereof
Clean Air Choices Cleaner Certificate	<del>\$186.30</del> <u>190.96</u>

At the time of filing for certification of any Consumer Cleaning Products Used at Institutional and Commercial Facilities, the applicant shall submit a fee of ~~\$858.71~~880.18 for each product to be tested. Adjustments, including refunds or additional billings, shall be made to the submitted fee as necessary. A Consumer Cleaning Products Used at Institutional and Commercial Facilities Certificate shall be valid for three (3) years from the date of issuance and shall be renewed upon the determination of the Executive Officer that the product(s) certified as a Consumer Cleaning Products Used at Institutional and Commercial Facilities continue(s) to meet Consumer Cleaning Products Used at Institutional and Commercial Facilities criteria, and has not been reformulated.

- (t) All Facility Registration Holders
  - (1) Applicability

The requirements of this subdivision apply to all holders of a Facility Registration.
  - (2) Rule 301 Applicability

Unless specifically stated otherwise, all Facility Registration holders shall be subject to all other provisions of Rule 301 - Permit Fees.
  - (3) Fee Applicability to Existing Facilities

Existing facilities entering the Facility Registration Program shall pay no fee if no changes are initiated by actions of the permittee to the existing permit terms or conditions or to the draft Facility Registration prepared by the District.
  - (4) Duplicate of Facility Registrations

A request for a duplicate of a Facility Registration shall be made in writing by the permittee. The permittee shall, at the time a written request is submitted, pay ~~\$26.34~~27.00 for the first page and ~~\$1.86~~1.91 for each additional page in the Facility Registration.
  - (5) Reissued Facility Registrations

A request for a reissued Facility Registration shall be made in writing by the permittee where there is a name or address change without a change of operator or location, or for an administrative change in permit description or a change in permit conditions to reflect actual operating conditions, which do not require any engineering evaluation, and do not cause a change in emissions. The permittee shall, at the time a written request is submitted, pay ~~\$203.93~~209.03 for the first equipment listed in the Facility Registration plus ~~\$1.86~~1.91 for each additional equipment listed in the Facility Registration.
- (u) Fees for Non-permitted Emission Sources Subject to Rule 222
  - (1) Initial Filing Fee

Prior to the operation of the equipment, the owner/operator of an emission source subject to Rule 222 shall pay to the District an initial non-refundable non-transferable filing and processing fee of ~~\$198.13~~203.08 for each emission source.

(2) Change of Operator/Location

If the owner/operator or the location of an emission source subject to Rule 222 changes, the current owner/operator must file a new application for Rule 222 and pay to the District an initial non-refundable non-transferable filing and processing fee of ~~\$198.13~~\$203.08 for each emission source.

(3) Annual Renewal Fee

On an annual re-filing date set by the Executive Officer the owner/operator of a source subject to Rule 222 shall pay a renewal fee of ~~\$198.13~~\$203.08 (except for non-retrofitted boilers). At least thirty (30) days before such annual re-filing date, all owners/operators of emission sources subject to Rule 222 will be notified by either electronic or regular mail of the amount to be paid and the due date for the annual re-filing fee.

(4) Notification of Expiration

If the annual re-filing fee is not paid within thirty (30) days after the due date, the filing will expire and no longer be valid. In such case, the owner/operator will be notified by either electronic or regular mail of the expiration and the consequences of operating equipment without a valid Rule 222 filing.

(5) Reinstating Expired Filings

To re-establish expired filings, the owner/operator of a source subject to Rule 222 shall pay a reinstatement fee of fifty percent (50%) of the amount of fees due per emission source. Payment of all overdue fees shall be made in addition to the reinstatement surcharge. Payment of such fees shall be made within one year of the date of expiration. If the period of expiration has exceeded one year or the affected equipment has been altered, the owner/operator of an emission source subject to Rule 222 shall file a new application and pay all overdue fees.

(v) Fees for Expedited Processing Requests

An applicant has the option to request expedited processing for an application for a permit, CEQA work, an application for an ERC/STC, Air Dispersion Modeling, HRA, Source Test Protocols and Report Fees and Asbestos Procedure 4&5 notifications. A request for expedited processing pursuant to this section shall be made upon initial application submittal. Expedited processing is intended to be performed by District Staff strictly during overtime work. Approval of such a

**Proposed Amended Rule 301 (Cont.) (Updated July 1, 2016 Amended June 2, 2017)**

request is contingent upon the District having necessary procedures in place to implement an expedited processing program and having available qualified staff for overtime work to perform the processing requested. The applicant shall be notified whether or not the request for expedited processing has been accepted within 30 days of submittal of the request. If the request for expedited processing is not accepted by the District, the additional fee paid for expedited processing will be refunded to the applicant.

(1) Permit Processing Fee

Fees for requested expedited processing of permit applications will be an additional fee of fifty percent (50%) of the applicable base permit processing fee (after taking any discounts for identical equipment but not the higher fee for operating without a permit) by equipment schedule. For schedule F and higher as shown in the table below in this paragraph, expedited processing fees will include an additional hourly fee, as set forth in the applicable “Non-Title V Added Base Hourly Fee” or “Title V Added Base Hourly Fee” columns, when the processing time exceeds times as indicated in the “Processing Time Exceeding” column ~~below~~; but not to exceed the total amounts in the applicable “Non-Title V Maximum Added Base Cap Fee” or “Title V Maximum Added Base Cap Fee” columns. ~~4, based on the applicable schedule as follows:~~

FY 2017-18

<b>Processing Time Exceeding</b>	<b>Schedule</b>	<b>Non-Title V Added Base Hourly Fee \$</b>	<b>Non-Title V Maximum Added Base Cap Fee</b>	<b>Title V Added Base Hourly Fee</b>	<b>Title V Maximum Added Base Cap Fee</b>
<b><u>FY 2017-18</u></b>					
99 hours	F	<del>-\$243.45</del> <u>259.52</u>	<del>\$45,758.40</del> <u>48,778.45</u>	<u>\$289.46</u>	<u>\$54,406.74</u>
117 hours	G	<del>-\$243.45</del> <u>259.52</u>	<del>\$78,394.89</del> <u>83,568.95</u>	<u>\$289.46</u>	<u>\$93,211.52</u>
182 hours	H	<del>-\$243.45</del> <u>259.52</u>	<del>\$99,678.91</del> <u>106,257.72</u>	<u>\$289.46</u>	<u>\$118,518.22</u>

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<b><u>FY 2018-19 and thereafter</u></b>					
<u>99 hours</u>	<u>F</u>	<u>\$269.90</u>	<u>\$50,729.59</u>	<u>\$335.78</u>	<u>\$63,111.82</u>
<u>117 hours</u>	<u>G</u>	<u>\$269.90</u>	<u>\$86,911.71</u>	<u>\$335.78</u>	<u>\$108,125.36</u>
<u>182 hours</u>	<u>H</u>	<u>\$269.90</u>	<u>\$110,508.03</u>	<u>\$335.78</u>	<u>\$137,481.14</u>

(2) CEQA Fee

Fees for requested expedited CEQA work will be an additional fee based upon actual review and work time billed at a rate for staff overtime which is equal to the staff's hourly rate of ~~\$162.29~~166.35 plus ~~\$84.18~~86.28 per hour (one half of hourly plus mileage). The established CEQA fees found in the provisions of Rule 301~~(i)~~(j) shall be paid at the time of filing with the additional overtime costs billed following permit issuance. Notwithstanding other provisions of this section, fees are due at the time specified in the bill which will allow a reasonable time for payment. This proposal is contingent upon the ability of the District to implement the necessary policies and procedures and the availability of qualified staff for overtime work.

(3) CEMS, FSMS, and ACEMS Fee

Fees for requested expedited processing of CEMS, FSMS, and ACEMS applications will be an additional fee based upon actual review and work time billed at a rate for staff overtime which is equal to the staff's hourly rate of ~~\$162.29~~166.35 plus ~~\$84.18~~86.28 per hour (one half of hourly plus mileage). The established "Basic Fee" schedule found in the CEMS, FSMS, and ACEMS Fee Schedule in TABLE IIC shall be paid at the time of filing with the additional overtime costs billed following project completion. Notwithstanding other provisions of this section, fees are due at the time specified in the bill which will allow a reasonable time for payment. A request for expedited CEMS, FSMS, and ACEMS application work can only be made upon initial work submittal, and approval of such a request is contingent upon the ability of the District to implement the necessary policies and procedures and the availability of qualified staff for overtime work.

- (4) Air Dispersion Modeling, HRA, Source Test Protocols and Reports Fees  
Fees for requested expedited review and evaluation of air dispersion modelings, health risk assessments, source test protocols and source test reports will be an additional fee based upon actual review and work time billed at a rate for staff overtime which is equal to the staff's hourly rate of ~~\$135.91~~139.31 plus ~~\$70.50~~72.26 per hour (one half of hourly plus mileage).
- (5) ERC/STC Application Fees  
Fees for requested expedited review and evaluation of ERC/STC application fees will be an additional fee based upon actual review and work time billed at a rate for staff overtime which is equal to the staff's hourly rate of ~~\$162.29~~166.35 plus ~~\$84.18~~86.28 per hour (one half of hourly plus mileage).
- (6) Procedure 4 & 5 Evaluation  
Fees for requested expedited reviews and evaluation of Procedure 4 or 5 plans per Rule 301(n) Asbestos Fees will be an additional fee of fifty percent (50%) of the Procedure 4 & 5 plan evaluation fee.
- (w) Enforcement Inspection Fees for Statewide Portable Equipment Registration Program (PERP)
  - (1) Registered Portable Equipment Unit Inspection Fee  
Registered portable equipment units are those which emit PM10 in excess of that emitted by an associated engine alone. An hourly fee of \$98.00 shall be assessed for a triennial portable equipment unit inspection, including the subsequent investigation and resolution of violations, if any, of applicable state and federal requirements, not to exceed \$500.00 per unit.
  - (2) Registered Tactical Support Equipment (TSE) Inspection Fee  
Registered TSE includes registered equipment using a portable engine, including turbines, that meet military specifications, owned by the U.S. Department of Defense, the U.S. military services, or its allies, and used in combat, combat support, combat service support, tactical or relief operations, or training for such operations.
    - (A) To determine compliance with all applicable state and federal requirements, each registered TSE unit will be inspected once per calendar year.

- (i) For registered TSE units determined to be in compliance with all applicable state and federal requirements during the annual inspection:
    - (a) A fee for the annual inspection of a single registered TSE unit shall be assessed at a unit cost of \$75.00.
    - (b) A fee for annual inspection of two or more registered TSE units at a single location shall be assessed at the lesser of the following costs:
      - (1) The actual time to conduct the inspection at the rate of \$100.25 per hour; or
      - (2) A unit cost of \$75.00 per registered TSE unit inspected.
  - (ii) For registered TSE units determined to be out of compliance with one or more applicable state or federal requirements during the annual inspection, fees for the annual inspection (including the subsequent investigation and resolution of the violation) shall be assessed at the lesser of the following costs:
    - (1) The actual time to conduct the inspection at the rate of \$100.25 per hour; or
    - (2) A unit cost of \$75.00 per registered TSE unit inspected.
- (3) Off-hour Inspection Fee  
In addition to the inspection fees stated above, any arranged inspections requested by the holder of the registration that are scheduled outside of District normal business hours may be assessed an additional off-hour inspection fee of \$40.96 per hour for the time necessary to complete the inspection.
- (4) Notice to Pay and Late Payment Surcharge  
A notice to pay the inspection fees will be mailed to the registration holder. Fees are due and payable immediately upon receipt of the notice to pay. All inspection fees required under this section are due within 30 days of the invoice date. If fee payment is not received by the thirtieth (30th) day following the date of the notice to pay, the fee shall be considered late and, a late payment surcharge of \$70.11 per portable engine or equipment unit shall be imposed, not to exceed \$138.73 for any notice to pay. For the

purpose of this subparagraph, the inspection fee payment shall be considered to be timely received by the District if it is postmarked by the United States Postal Service on or before the thirtieth (30th) day following the date of the notice to pay. If the thirtieth (30th) day falls on a Saturday, Sunday, or a state holiday, the fee payment may be postmarked on the next business day following the Saturday, Sunday, or the state holiday with the same effect as if it had been postmarked on the thirtieth (30th) day. Failure to pay the inspection fees and any late payment surcharge within 120 days of the date of the initial notice to pay may result in the suspension or revocation of the registration by CARB. Once a registration has been suspended, CARB will not consider reinstatement until all fees due, including late payment surcharge fees, have been paid in full.

(x) Rule 1149 and Rule 1166 Notification Fees

Any person who is required by the District to submit a written notice pursuant to Rule 1149, Rule 1166 or for soil vapor extraction projects shall pay a notification fee of ~~\$59.37~~\$60.85 per notification.

(y) Fees for the Certification of Equipment Subject to the Provisions of Rules 1111, 1121 and 1146.2

(1) Initial Certification Fee

Any person requesting certification pursuant to rules 1111, 1121 or 1146.2 shall pay a fee of ~~\$547.22~~\$560.90 per certification letter for each family of model series certified. This fee shall be paid in addition to the fees paid to review any associated source test report(s).

(2) Additional Fees for Modification or Extension of Families to Include a New Model(s)

Any person requesting a modification or extension of a certification already issued to include a new model(s) shall pay an additional fee of ~~\$273.62~~\$280.46 for certification of new models added by extension to the previously certified model series per request.



- (3) Failure to pay all certification fees shall result in the revocation of each certified piece of equipment that was evaluated for which fee payment has not been received within 30 days after the due date.
- (z) “No Show” Fee for Rule 461 – Gasoline Dispensing Equipment Scheduled Testing
  - (1) Reverification, and Performance Testing

If a testing company does not show for a Reverification test, or Performance test within one hour of its original scheduled time, and an SCAQMD inspector arrives for the inspection, a “No Show” fee of ~~\$402.37~~12.43 shall be charged to the testing company.
  - (2) Pre-Backfill Inspection

If a contracting company is not ready for a Pre-Backfill inspection of its equipment at the original scheduled time, and/or did not notify the SCAQMD inspector of postponement/cancellation at least three hours prior to the scheduled time, a “No Show” fee of ~~\$402.37~~12.43 shall be charged to the contracting company.
- (aa) Defense of Permit

Within 10 days of receiving a complaint or other legal process initiating a challenge to the SCAQMD’s issuance of a permit, the SCAQMD shall notify the applicant or permit holder in writing. The applicant or permit holder may, within 30 days of posting of the notice, request revocation of the permit or cancellation of the application. An applicant or permit holder not requesting revocation or cancellation within 30 days of receipt of notice from the District shall be responsible for reimbursement to the District for all reasonable and necessary costs to defend the issuance of a permit or permit provisions against a legal challenge, including attorney’s fees and legal costs. The Executive Officer will invoice the applicant or permit holder for fees and legal costs at the conclusion of the legal challenge. The SCAQMD and the applicant or permit holder will negotiate an indemnity agreement within 30 days of the notice by SCAQMD to the facility operator. The agreement will include, among other things, attorneys’ fees and legal costs. The Executive Officer or designee may execute an indemnity agreement only after receiving authorization from the Administrative Committee. The Executive Officer may in his discretion, waive all or any part of such costs upon a determination that payment for such costs would impose an unreasonable hardship upon the applicant or permit holder.

**Proposed Amended Rule 301 (Cont.) (~~Updated July 1, 2016~~Amended June 2, 2017)**

~~(ab) — Temporary Rebate of CPI Adjustment~~

~~For FY 2010-2011, owners or operators subject to and paying fees pursuant to the following paragraphs —~~

~~(d)(2) Annual Operating Fees~~

~~(e)(1) Annual Operating Emission Fee Applicability~~

~~(e)(4) Flat Annual Operating Emission Fee~~

~~(e)(7) Fee for Toxic Air contaminants or Ozone Depleters~~

~~shall be rebated the fee increase corresponding to the 2.1% CPI adjustment.~~

**FY 2017-18**  
**SUMMARY PERMIT FEE RATES -**  
**PERMIT PROCESSING, CHANGE OF CONDITIONS,**  
**ALTERATION/MODIFICATION**

<b>Schedule</b>	<b><u>Non-Title V Permit Processing Fee</u></b>	<b><u>Title V Permit Processing</u></b>	<b><u>Non-Title V Change of Condition</u></b>	<b><u>Title V Change of Condition</u></b>	<b><u>Non Title V Alteration/Modification</u></b>	<b><u>Title V Alteration/Modification</u></b>
<b>A</b>	<u>\$1,557.83</u> <u>1,660.65</u>	<u>\$1,852.26</u>	<u>\$811.45</u> <u>865.01</u>	<u>\$964.81</u>	<u>\$1,557.83</u> <u>1,660.65</u>	<u>\$1,852.26</u>
<b>A1</b>	<u>\$1,557.83</u> <u>1,660.65</u>	<u>\$1,852.26</u>	<u>\$811.45</u> <u>865.01</u>	<u>\$964.81</u>	<u>\$1,557.83</u> <u>1,660.65</u>	<u>\$1,852.26</u>
<b>B</b>	<u>\$2,482.82</u> <u>2,646.69</u>	<u>\$2,952.07</u>	<u>\$1,229.97</u> <u>1,311.15</u>	<u>\$1,462.43</u>	<u>\$2,482.82</u> <u>2,646.69</u>	<u>\$2,952.07</u>
<b>B1</b>	<u>\$3,927.10</u> <u>4,186.29</u>	<u>\$4,669.32</u>	<u>\$2,128.67</u> <u>2,269.16</u>	<u>\$2,530.99</u>	<u>\$3,927.10</u> <u>4,186.29</u>	<u>\$4,669.32</u>
<b>C</b>	<u>\$3,927.10</u> <u>4,186.29</u>	<u>\$4,669.32</u>	<u>\$2,128.67</u> <u>2,269.16</u>	<u>\$2,530.99</u>	<u>\$3,927.10</u> <u>4,186.29</u>	<u>\$4,669.32</u>
<b>D</b>	<u>\$5,420.06</u> <u>5,777.78</u>	<u>\$6,444.45</u>	<u>\$3,640.60</u> <u>3,880.88</u>	<u>\$4,328.67</u>	<u>\$5,420.06</u> <u>5,777.78</u>	<u>\$6,444.45</u>
<b>E</b>	<u>\$6,231.43</u> <u>6,642.70</u>	<u>\$7,409.17</u>	<u>\$5,345.29</u> <u>5,698.08</u>	<u>\$6,355.55</u>	<u>\$6,231.43</u> <u>6,642.70</u>	<u>\$7,409.17</u>
<b>F</b>	<u>\$15,659.93</u> <u>16,693.49</u> + T&M	<u>\$18,619.66</u> ± T&M	<u>\$7,803.77</u> <u>8,318.82</u> ± T&M	<u>\$9,278.68</u> ± T&M	<u>\$12,414.14</u> <u>13,233.47</u> + T&M	<u>\$14,760.41</u> ± T&M
<b>G</b>	<u>\$18,483.59</u> <u>19,703.51</u> + T&M	<u>\$21,976.99</u> ± T&M	<u>\$13,242.48</u> <u>14,116.48</u> ± T&M	<u>\$15,745.31</u> ± T&M	<u>\$15,237.77</u> <u>16,243.46</u> + T&M	<u>\$18,117.71</u> ± T&M
<b>H</b>	<u>\$28,642.06</u> <u>30,532.44</u> + T&M	<u>\$34,055.41</u> ± T&M	<u>\$16,790.37</u> <u>17,898.53</u> ± T&M	<u>\$19,963.75</u> ± T&M	<u>\$25,396.25</u> <u>27,072.40</u> + T&M	<u>\$30,196.14</u> ± T&M

**+T&M = Time and Materials Charge in Addition to the Rates Above for Selected Schedules**

<b><u>Schedule</u></b>	<b><u>Begin Charging Hourly Rate After (hrs)</u></b>	<b><u>Non-Title V T&amp; M Rate (\$/hr)</u></b>	<b><u>Title V T&amp; M Rate (\$/hr)</u></b>	<b><u>Non-Title V Not to Exceed (\$)</u></b>	<b><u>Title V Not to Exceed (\$)</u></b>
<b><u>F</u></b>	<u>99</u>	<u>\$173.00</u>	<u>\$192.96</u>	<u>\$32,518.98</u>	<u>\$36,271.17</u>
<b><u>G</u></b>	<u>117</u>	<u>\$173.00</u>	<u>\$192.96</u>	<u>\$55,712.60</u>	<u>\$62,140.98</u>

**Proposed Amended Rule 301 (Cont.) (Updated July 1, 2016 Amended June 2, 2017))**

<b><u>H</u></b>	<b><u>182</u></b>	<b><u>\$173.00</u></b>	<b><u>\$192.96</u></b>	<b><u>\$70,838.47</u></b>	<b><u>\$79,012.14</u></b>
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**FY 2018-19 and thereafter**  
**SUMMARY PERMIT FEE RATES - PERMIT PROCESSING, CHANGE OF**  
**CONDITIONS, ALTERATION/MODIFICATION**

<b><u>Schedule</u></b>	<b><u>Non-Title V Permit Processing</u></b>	<b><u>Title V Permit Processing</u></b>	<b><u>Non-Title V Change of Condition</u></b>	<b><u>Title V Change of Condition</u></b>	<b><u>Non Title V Alteration/Modification</u></b>	<b><u>Title V Alteration/Modification</u></b>
<b><u>A</u></b>	<b><u>\$1,727.07</u></b>	<b><u>\$2,148.62</u></b>	<b><u>\$899.61</u></b>	<b><u>\$1,119.18</u></b>	<b><u>\$1,727.07</u></b>	<b><u>\$2,148.62</u></b>
<b><u>A1</u></b>	<b><u>\$1,727.07</u></b>	<b><u>\$2,148.62</u></b>	<b><u>\$899.61</u></b>	<b><u>\$1,119.18</u></b>	<b><u>\$1,727.07</u></b>	<b><u>\$2,148.62</u></b>
<b><u>B</u></b>	<b><u>\$2,752.55</u></b>	<b><u>\$3,424.40</u></b>	<b><u>\$1,363.59</u></b>	<b><u>\$1,696.42</u></b>	<b><u>\$2,752.55</u></b>	<b><u>\$3,424.40</u></b>
<b><u>B1</u></b>	<b><u>\$4,353.74</u></b>	<b><u>\$5,416.41</u></b>	<b><u>\$2,359.93</u></b>	<b><u>\$2,935.95</u></b>	<b><u>\$4,353.74</u></b>	<b><u>\$5,416.41</u></b>
<b><u>C</u></b>	<b><u>\$4,353.74</u></b>	<b><u>\$5,416.41</u></b>	<b><u>\$2,359.93</u></b>	<b><u>\$2,935.95</u></b>	<b><u>\$4,353.74</u></b>	<b><u>\$5,416.41</u></b>
<b><u>D</u></b>	<b><u>\$6,008.89</u></b>	<b><u>\$7,475.56</u></b>	<b><u>\$4,036.11</u></b>	<b><u>\$5,021.26</u></b>	<b><u>\$6,008.89</u></b>	<b><u>\$7,475.56</u></b>
<b><u>E</u></b>	<b><u>\$6,908.41</u></b>	<b><u>\$8,594.64</u></b>	<b><u>\$5,926.00</u></b>	<b><u>\$7,372.44</u></b>	<b><u>\$6,908.41</u></b>	<b><u>\$8,594.64</u></b>
<b><u>F</u></b>	<b><u>\$17,361.23 + T&amp;M</u></b>	<b><u>\$21,598.81 + T&amp;M</u></b>	<b><u>\$8,651.57 + T&amp;M</u></b>	<b><u>\$10,763.27 + T&amp;M</u></b>	<b><u>\$13,762.81 + T&amp;M</u></b>	<b><u>\$17,122.08 + T&amp;M</u></b>
<b><u>G</u></b>	<b><u>\$20,491.65 + T&amp;M</u></b>	<b><u>\$25,493.31 + T&amp;M</u></b>	<b><u>\$14,681.14 + T&amp;M</u></b>	<b><u>\$18,264.56 + T&amp;M</u></b>	<b><u>\$16,893.20 + T&amp;M</u></b>	<b><u>\$21,016.54 + T&amp;M</u></b>
<b><u>H</u></b>	<b><u>\$31,753.74 + T&amp;M</u></b>	<b><u>\$39,504.28 + T&amp;M</u></b>	<b><u>\$18,614.48 + T&amp;M</u></b>	<b><u>\$23,157.95 + T&amp;M</u></b>	<b><u>\$28,155.30 + T&amp;M</u></b>	<b><u>\$35,027.52 + T&amp;M</u></b>

<b><u>Schedule</u></b>	<b><u>Begin Charging Hourly Rate After (hrs)</u></b>	<b><u>Non-Title V T&amp; M Rate (\$/hr)</u></b>	<b><u>Title V T&amp; M Rate (\$/hr)</u></b>	<b><u>Non-Title V Not to Exceed (\$)</u></b>	<b><u>Title V Not to Exceed (\$)</u></b>
<b><u>F</u></b>	<b><u>99</u></b>	<b><u>\$179.92</u></b>	<b><u>\$223.83</u></b>	<b><u>\$33,819.74</u></b>	<b><u>\$42,074.56</u></b>
<b><u>G</u></b>	<b><u>117</u></b>	<b><u>\$179.92</u></b>	<b><u>\$223.83</u></b>	<b><u>\$57,941.11</u></b>	<b><u>\$72,083.54</u></b>

**Proposed Amended Rule 301 (Cont.) (Updated July 1, 2016 Amended June 2, 2017))**

<b><u>H</u></b>	<b><u>182</u></b>	<b><u>\$179.92</u></b>	<b><u>\$223.83</u></b>	<b><u>\$73,672.01</u></b>	<b><u>\$91,654.08</u></b>
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**~~F: T&M = Time and Material charged at \$162.29 per hour above 99 hours; not to exceed \$30,505.61.~~**

**~~G: T&M = Time and Material charged at \$162.29 per hour above 117 hours; not to exceed \$52,263.23.~~**

**~~H: T&M = Time and Material charged at \$162.29 per hour above 182 hours; not to exceed \$66,452.60.~~**

**SUMMARY OF ERC PROCESSING RATES, BANKING, CHANGE OF TITLE, ALTERATION/MODIFICATION, CONVERSION TO SHORT TERM CREDITS, RE-ISSUANCE OF SHORT TERM CREDITS, RETIREMENT OF SHORT TERM CREDITS FOR TRANSFER INTO RULE 2202, and TRANSFER OF ERCs OUT OF RULE 2202**

<b>Schedule</b>	<b>Banking Application</b>	<b>Change of Title</b>	<b>Al te ra tio n/ M od ifi ca tio n</b>	<b>Conversion to Short Term Credits</b>	<b>Re-Issuance of Short Term Credits</b>	<b>Retirement of Short Term Emission Credits for Transfer into Rule 2202 and Transfer of ERCs Out of Rule 2202</b>
<b>I</b>	<b>\$4,019.82</b>	<b>\$710.08</b>	<b>\$710.08</b>	<b>\$710.08</b>	<b>\$710.08</b>	<b>\$238.82</b>

**Proposed Amended Rule 301 (Cont.) (Updated July 1, 2016 Amended June 2, 2017))**

<b><u>Schedule I</u></b>	<b><u>Non-Title V FY 2017-18</u></b>	<b><u>Title V FY 2017-18</u></b>	<b><u>Non-Title V FY 2018-19 and thereafter</u></b>	<b><u>Title V FY 2018-19 and thereafter</u></b>
<b><u>Banking Application</u></b>	<u>\$4,285.13</u>	<u>\$4,779.57</u>	<u>\$4,456.54</u>	<u>\$5,544.30</u>
<b><u>Change of Title</u></b>	<u>\$756.95</u>	<u>\$844.29</u>	<u>\$787.23</u>	<u>\$979.38</u>
<b><u>Alteration/ Modification</u></b>	<u>\$756.95</u>	<u>\$844.29</u>	<u>\$787.23</u>	<u>\$979.38</u>
<b><u>Conversion to Short Term Credits</u></b>	<u>\$756.95</u>	<u>\$844.29</u>	<u>\$787.23</u>	<u>\$979.38</u>
<b><u>Re-Issuance of Short Term Credits</u></b>	<u>\$756.95</u>	<u>\$844.29</u>	<u>\$787.23</u>	<u>\$979.38</u>
<b><u>Retirement of Short Term Emission Credits for Transfer into Rule 2202 and Transfer of ERCs Out of Rule 2202</u></b>	<u>\$254.58</u>	<u>\$283.96</u>	<u>\$264.76</u>	<u>\$329.39</u>

**SUMMARY OF PERMIT FEE RATES  
CHANGE OF OPERATOR<sup>a</sup>**

<b><u>Facility Type</u></b>	<b><u>Small Business</u></b>	<b><u>Non-Small Business</u></b>
<b><u>Non-Title V</u></b>	<u>\$230.64 for FY 2017-18 and \$239.87 for FY 2018-19 and thereafter</u>	<u>\$633.40 for FY 2017-18 and <del>\$658.74</del>658.74 for FY 2018-19 and thereafter</u>
<b><u>Title V</u></b>	<u><del>\$216.36</del>257.25 for FY 2017- 18 and \$298.41 for FY 2018- 19 and thereafter</u>	<u><del>\$594.18</del>706.48 for FY 2017-18 and \$819.52 for FY 2018-19 and thereafter</u>

<sup>a</sup> The change of operator fee for Non-RECLAIM Title V facilities shall not exceed \$7,390.27~~8,787.03~~ for FY 2017-18 and \$10,192.95~~10,192.96~~ for FY 2018-19 and thereafter per facility and for all other Non-RECLAIM facilities shall not exceed \$14,780.54~~17,574.06~~15,756.06 for FY 2017-18 and \$20,385.91~~20,385.91~~16,386.30 for FY 2018-19 and thereafter per facility.

TABLE IA - PERMIT FEE RATES FOR CONTROL EQUIPMENT

Equipment/Process	Schedule
Abatement System/HEPA, Asbestos, Lead	B
Activated Carbon Adsorber, Venting Single Source (s.s.=single source)	B
Activated Carbon Adsorber, Venting Multiple Source (m.s.=multiple sources)	C
Activated Carbon Adsorber, Other	D
Activated Carbon Adsorber, Drum Venting Toxic Source (t.s = toxic source)	C
Activated Carbon Adsorber, with regeneration	E
Afterburner ( $\leq 1$ MMBTU/hr, venting s.s.)	B
Afterburner ( $\leq 1$ MMBTU/hr, venting m.s.)	C
Afterburner, Catalytic for Bakery Oven	C
Afterburner, Direct Flame	D
Afterburner/Oxidizer: Regenerative Ceramic/Hot Rock Bed Type, Recuperative Thermal	D
Afterburner/Oxidizer, Catalytic	D
Air Filter, Custom	C
Amine (or DEA) Regeneration Unit <sup>1</sup>	D
Amine Treating Unit <sup>1</sup>	D
Baghouse, Ambient ( $\leq 100$ FT <sup>2</sup> )	A
Baghouse, Ambient ( $> 100 - 500$ FT <sup>2</sup> )	B
Baghouse, Ambient ( $> 500$ FT <sup>2</sup> )	C
Baghouse, Hot ( $> 350$ F)	D
Biofilter ( $\leq 100$ cfm)	B
Biofilter ( $> 100$ cfm)	C
Boiler as Afterburner	D
CO Boiler	F
Condenser	C
Control Systems, two in series	C
Control Systems, three in series	D
Control Systems, four or more in series	E
Control Systems, Venting Plasma Arc Cutters	B1
Cyclone	B
Dry Filter ( $\leq 100$ FT <sup>2</sup> )	A

Equipment/Process	Schedule
Dry Filter ( $> 100 - 500$ FT <sup>2</sup> )	B
Dry Filter ( $> 500$ FT <sup>2</sup> )	C
Dust Collector/HEPA, other Rule 1401 toxics	C
Electrostatic Precipitator, Restaurant	B
Electrostatic Precipitator, Asphalt Batch Equipment	C
Electrostatic Precipitator, Extruder	B
Electrostatic Precipitator, $< 3000$ CFM	B
Electrostatic Precipitator, $\geq 3000$ CFM	D
Electrostatic Precipitator for Fluid Catalytic Cracking Unit (FCCU)	H
Ethylene Oxide Sterilization, Control, Hospital	B
Flare, Landfill/Digester Gas, Enclosed	E
Flare, Landfill/Digester Gas, Open	C
Flare, Portable	B
Flare System, Refinery <sup>2</sup>	F
Flare Other	C
Flue Gas Desulfurization <sup>1</sup>	D
Gas Absorption Unit <sup>3</sup>	D
Gas Scrubbing System <sup>1</sup>	F
Incinerator, Afterburner	D
Mesh pads, for toxics gas stream	C
Mesh pads, for other acid mists	B
Mist Control	B
Mist Eliminator with HEPA	C
Negative Air Machine/HEPA, Asbestos, Lead	A
Non-Selective Catalytic Reduction	B
Odor Control Unit	D
Relief and Blowdown System <sup>4</sup>	D
Scrubber, Biofiltration	C
Scrubber Controlling NO <sub>x</sub> venting	D
Scrubber Controlling SO <sub>x</sub> venting	D
Scrubber Controlling HCL or NH <sub>3</sub> venting s.s.	B
Scrubber Controlling HCL or NH <sub>3</sub> venting m.s.	C
Scrubber, NO <sub>x</sub> , multistage	D

TABLE IA - PERMIT FEE RATES FOR CONTROL EQUIPMENT

Equipment/Process	Schedule
Scrubber, NO <sub>x</sub> , single stage	C
Scrubber, Odor, <5000 cfm	C
Scrubber, Other venting s.s.	B
Scrubber, Other venting m.s.	C
Scrubber, Other Chemical venting s.s.	B
Scrubber, Other Chemical venting m.s.	D
Scrubber, Particulates venting s.s.	B
Scrubber, Particulates venting m.s.	C
Scrubber, Particulates venting t.s.	D
Scrubber, Restaurant	B
Scrubber, Toxics venting	D
Scrubber, Venturi venting s.s.	B
Scrubber, Venturi venting m.s.	C
Scrubber, Venturi venting t.s.	C
Scrubber, Water (no packing)	B
Selective Catalytic Reduction (SCR)	C
Settling Chamber	B
Ship Hold Hatch Cover	A
Slop Oil Recovery System	D
Sour Water Oxidizer Unit <sup>5</sup>	D
Sour Water Stripper <sup>6</sup>	D
Sparger	B
Spent Acid Storage & Treating Facility <sup>7</sup>	E
Spent Carbon Regeneration System	D
Spent Caustic Separation System <sup>8</sup>	D
Spray Booth/Enclosure, Other	B

Equipment/Process	Schedule
Spray Booth/Enclosure, Powder Coating System with single or multiple APC for particulates	B
Spray Booth, Metallizing	C
Spray Booth with Carbon Adsorber (non-regenerative)	C
Spray Booths (multiple) with Carbon Adsorber (non-regenerative)	D
Spray Booth(s) with Carbon Adsorber (regenerative)	E
Spray Booth(s) (1 to 5) with Afterburner/Oxidizer (Regenerative/Recuperative)	D
Spray Booths (>5) with Afterburner/Oxidizer (Regenerative/Recuperative)	E
Spray Booth, Automotive, with Multiple VOC Control Equipment	C
Spray Booth with Multiple VOC Control	D
Spray Booths (multiple) with Multiple VOC Control Equipment	E
Storm Water Handling & Treating System <sup>9</sup>	E
Sulfur Recovery Equipment <sup>7</sup>	H
Tail Gas Incineration	D
Tail Gas Unit <sup>10</sup>	H
Storage Tank, Degassing Unit	D
Ultraviolet Oxidation	D
Vapor Balance System <sup>11</sup>	B
Vapor Recovery, Serving Crude Oil Production <sup>11</sup>	D
Vapor Recovery, Serving Refinery Unit <sup>11</sup>	E
Waste Gas Incineration Unit	E

<sup>1</sup> Including, but not limited to, all or part of the following: Accumulators, Columns, Condensers, Drums, Heat Exchangers, Knock Out Pots, Pots, Pumps, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels

<sup>2</sup> Including, but not limited to, all or part of the following: Flare, Compressors, Drums, Knock Out Pots, Pots, Vessels

<sup>3</sup> Including, but not limited to, all or part of the following: Accumulators, Columns,



**TABLE IA - PERMIT FEE RATES FOR CONTROL EQUIPMENT**

Condensers, Drums, Heat Exchangers, Knock Out Pots, Pots, Pumps, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, towers, Vessels
<sup>4</sup> Including, but not limited to, all or part of the following: Compressors, Drums, Knock Out Pots, Pots	<sup>8</sup> Including, but not limited to, all or part of the following: Process Tanks, Separators, Tanks
<sup>5</sup> Including, but not limited to, all or part of the following: Accumulators, Columns, Drums, Knock Out Pots, Tanks, Vessels	<sup>9</sup> Including, but not limited to, all or part of the following: Air Floatation Units, Floatation Units, Filter Presses, Clarifiers, Settling Tanks, Waste Water Separators, Tanks
<sup>6</sup> Including, but not limited to, all or part of the following: Condensers, Coolers, Drums, Sumps, Vessels	<sup>10</sup> Including, but not limited to, all or part of the following: Absorbers, Condensers, Coolers, Drums, Heat Exchangers, Knock Out Pots, Reactors, Tanks, Vessels
<sup>7</sup> Including, but not limited to, all or part of the following: Accumulators, Clarifier, Columns, Compressors, Condensers, Drums, Filters, Filter Presses, Heat Exchangers, Knock Out Pots, Pits,	<sup>11</sup> Including, but not limited to, all or part of the following: Absorbers, Compressors, Condensers, Knock Out Pots, Pumps, Saturators

**TABLE IB - PERMIT FEE RATES FOR BASIC EQUIPMENT**

<b>Equipment/Process</b>	<b>Schedule</b>	<b>Equipment/Process</b>	<b>Schedule</b>
Abatement System, Asbestos, Lead	B	Aggregate Production/Crushing (<5000 tpd) Including, but not limited to, all or part of the following: Bins, Bucket Elevators, Conveyors, Feeders, Hoppers, Crushers, Cyclones, Log Washers, Mixers, Screens, Vibrating Grizzlies, Weigh Stations	C
Abrasive Blasting (Cabinet, Mach., Room)	B	Aggregate Production/Crushing (>=5000 tpd) Including, but not limited to, all or part of the following: Bins, Bucket Elevators, Conveyors, Feeders, Hoppers, Crushers, Cyclones, Log Washers, Mixers, Screens, Vibrating Grizzlies, Weigh Stations	D
Abrasive Blasting (Open)	A	Aggregate Screening Including, but not limited to, all or part of the following: Bins, Bucket Elevators, Conveyors, Feeders, Hoppers, Cyclones, Screens, Weigh Stations	C
Absorption Chillers, Gas-Fired, < 5 MM Btu/hr	B	Air Strippers	C
Absorption Chillers, Gas-Fired, => 5 MM Btu/hr	C	Aircraft Fueling Facility Including, but not limited to, all or part of the following: Storage Tanks, Dispensing Nozzles	D
Acetylene Purification System Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	C	Alkylation Unit Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	E
Acid Treating Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	E	Ammonia Mfg. Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Coolers, Drums, Ejectors, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	C
Adhesives Organic Additions Including, but not limited to, all or part of the following: Reactors, Mixers, Process Tanks, Vessels	C	Ammonia Vaporization Unit Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Coolers, Drums, Ejectors, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	C
Adsorption Chillers, Gas-Fired, < 5 MM Btu/hr	B		
Adsorption Chillers, Gas-Fired, => 5 MM Btu/hr	C		
Adsorption, Other	B		
Aeration Potable Water	C		
Aggregate, Tank Truck Loading/Conveying Including, but not limited to, all or part of the following: Bins, Bucket Elevators, Conveyors, Feeders, Hoppers, Weigh Stations	B		
Aggregate Production, with Dryer Including, but not limited to, all or part of the following: Bins, Bucket Elevators, Conveyors, Dryers, Feeders, Hoppers, Crushers, Cyclones, Log Washers, Mixers, Screens, Vibrating Grizzlies, Weigh Stations	E		

**TABLE IB - PERMIT FEE RATES FOR BASIC EQUIPMENT**

Equipment/Process	Schedule	Equipment/Process	Schedule
Animal Feed Processing, Conveying Including, but not limited to, all or part of the following: Conveyors, Bins, Hoppers, Bucket Elevators	B	Battery Charging/Manufacturing Including, but not limited to, all or part of the following: Cutters, Crushers, Separators, Process Tanks, Conveyors	C
Animal Feed Processing, Other Including, but not limited to, all or part of the following: Conveyors, Bins, Hoppers, Bucket Elevators, Mixers, Feeders, Grinders	C	Benzene/Toluene/Xylene Production Equip. Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	E
Anodizing (sulfuric, phosphoric)	B	Beryllium Machining and Control Including, but not limited to, all or part of the following: Machining Operations, Filters, Baghouses,	C
Aqueous Ammonia Transfer & Storage	C	Bleach Manufacturing Including, but not limited to, all or part of the following: Accumulators, Columns, Com-pressors, Condensers, Drums, Heat Exchangers, Knock Out Pots, Pots, Pumps, Tanks, Towers, Vessels	B
Aromatics Recovery Unit Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	E	Blending, Other	B
Asphalt Air Blowing	B	Boiler/hot water heater, various locations, diesel/oil fired (<300,000 BTU/hr)	A
Asphalt Blending/Batching Including, but not limited to, all or part of the following: Bins, Bucket Elevators, Conveyors, Cyclones, Dryers, Feeders, Hoppers, Knock Out Pots, Mixers, Screens, Tanks, Weigh Stations	E	Boiler/hot water heater, single facility, portable, diesel/oil fired (<600,000 BTU/hr)	A
Asphalt Coating	C	Boiler, Landfill/Digester Gas (< 5 MMBTU/hr)	B
Asphalt Day Tanker/Tar Pot	A	Boiler, Landfill/Digester Gas (5 to 20 MMBTU/hr)	C
Asphalt Refining Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	E	Boiler, Landfill/Digester Gas (>20 to 50 MMBTU/hr)	D
Asphalt Roofing Line Including, but not limited to, all or part of the following: Pumps, Conveyors, Process Tanks, Coater Operations, Cutters	C	Boiler, Landfill/Digester Gas (>50 MMBTU/hr)	F
Asphalt Roofing Saturator	D	Boiler, Natural gas-fired, 5 – 20 MM BTU/hr	C
Asphalt-Rubber Spraying	B	Boiler, Other Fuel (<5MMBTU/hr)	B
Auto Body Shredding	C	Boiler, Other Fuel (5 - 20 MMBTU/hr)	C
Autoclave, Non-sterilizing Type	B	Boiler, Other Fuel (>20 - 50 MMBTU/hr)	D
		Boiler, Other Fuel (> 50 MMBTU/hr)	E
		Boiler, Utility (> 50 MW)	H
		Brake Shoes, Grinding, Bonding and Debonding, Deriveter	B
		Bulk Chemical Terminal	B

**TABLE IB - PERMIT FEE RATES FOR BASIC EQUIPMENT**

<b>Equipment/Process</b>	<b>Schedule</b>	<b>Equipment/Process</b>	<b>Schedule</b>
Bulk Loading/Unloading Stn (< 50,000 GPD)	B	Chemical Additive Injection System Including, but not limited to, all or part of the following: Injectors, Compressors, Pumps	C
Bulk Loading/Unloading Rack (50,000 - 200,000 GPD)	D	Chip Dryer	D
Bulk Loading/Unloading Rack (> 200,000 GPD)	E	Circuit Board Etchers	B
Bulk Loading/Unloading	C	Cleaning, Miscellaneous	B
Carpet Processing System Including, but not limited to, all or part of the following: Process Tanks, Dryers, Carpet Beaters, Carpet Shears	D	Coal Bulk Loading Including, but not limited to, all or part of the following: Bins, Conveyors, Bucket Elevators, Hoppers, Loading Arms, Weigh Stations	E
Catalyst Handling System Including, but not limited to, all or part of the following: Centrifuge, Bins, Conveyors, Hoppers, Cyclones, Screens, Tanks, Weigh Stations	C	Coal Research Pilot / Equip (0-15 MMBTU/hr)	C
Catalyst Mfg./Calcining Including, but not limited to, all or part of the following: Bins, Conveyors, Reactors, Mixers, Process Tanks, Kilns	D	Coal Research Pilot / Equip (>15 MMBTU/hr)	D
Catalyst Storage (Hoppers)	C	Coal Tar Treating Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	C
Catalytic Reforming Unit Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Fractionators, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	E	Coating & Drying Equipment, Continuous Organic, Web Type Including, but not limited to, all or part of the following: Coater Operations, Process Tanks, Dryers	C
Caustic Treating Unit Including, but not limited to, all or part of the following: Knock Out Pots, Tanks, Towers, Vessels	E	Coffee Roaster < 50 lbs capacity with integrated afterburner	B
Cement Marine Loading & Unloading Including, but not limited to, all or part of the following: Bins, Conveyors, Bucket Elevators, Hoppers, Loading & Unloading Arms, Weigh Stations	E	Coffee Roasting, (11-49 lb roaster capacity Including, but not limited to, all or part of the following: Bins, Conveyors, Bucket Elevators, Hoppers, Roasters, Coolers	A
Cement Packaging Including, but not limited to, all or part of the following: Bins, Conveyors, Bucket Elevators, Hoppers, Weigh Stations	C	Coffee Roasting, 50-99 lb roaster capacity Including, but not limited to, all or part of the following: Bins, Conveyors, Bucket Elevators, Hoppers, Roasters, Coolers	B
Cement Truck Loading	C	Coffee Roasting, 100 lb or more roaster capacity Including, but not limited to, all or part of the following: Bins, Conveyors, Bucket Elevators, Hoppers, Roasters, Coolers	C
Charbroiler, Eating Establishment	A		
Charbroiler with Integrated Control	B		
Charbroiler, Food Manufacturing	C		

**TABLE IB - PERMIT FEE RATES FOR BASIC EQUIPMENT**

Equipment/Process	Schedule	Equipment/Process	Schedule
Coke Handling & Storage Facility Including, but not limited to, al or part of the following: Centrifuge, Bins, Conveyors, Clarifier, Hoppers, Cyclones, Screens, Tanks, Weigh Stations	E	Crude Oil, Distillation Unit Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Fractionators, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	E
Composting, in vessel Including, but not limited to, all or part of the following: Bins, Conveyors, Hoppers	C	Crude Oil/Gas/Water Separation System (< 30 BPD)** Including, but not limited to, all or part of the following: Adsorbers, Oil Water Separators, Oil Gas Water Separators, Pits, Sumps, Tanks, Vessels	C
Concrete/Asphalt Crushing Including, but not limited to, all or part of the following: Bins, Bucket Elevators, Conveyors, Feeders, Hoppers, Crushers, Cyclones, Screens, Vibrating Grizzlies, Weigh Stations	C	Crude Oil/Gas/Water Separation System, (>= 30 BPD & < 400 BPD)** Including, but not limited to, all or part of the following: Adsorbers, Oil Water Separators, Oil Gas Water Separators, Pits, Sumps, Tanks, Vessels	C
Concrete Batch Equipment Including, but not limited to, all or part of the following: Bins, Bucket Elevators, Conveyors, Dryers, Feeders, Hoppers, Crushers, Cyclones, Log Washers, Mixers, Screens, Vibrating Grizzlies, Weigh Stations	C	Crude Oil/Gas/Water Separation System, (>= 400 BPD)** Including, but not limited to, all or part of the following: Adsorbers, Oil Water Separators, Oil Gas Water Separators, Pits, Sumps, Tanks, Vessels	E
Confined Animal Facility	A	Decorating Lehr	C
Container Filling, Liquid	B	Decorator	B
Conveying, Other	B	Deep-Fat Fryer	C
Cooling Tower, Petroleum Operations	C	Dehydration Unit Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	C
Cooling Tower, Other	B	Degreaser, Cold Solvent Dipping	B
Core Oven	B	Degreaser, Cold Solvent Spray	C
Cotton Ginning System Including, but not limited to, all or part of the following: Hoppers, Conveyors, Separators, Screens, Classifiers, Mixers	D	Degreaser, (<= 1 lb VOC/day)	B
Crankcase Oil, Loading and Unloading	C	Degreaser (> 1 lb VOC/day)	B
Crematory	C	Degreaser, (VOCw/Toxics)	C
Crude Oil, Cracking Catalytic Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Fractionators, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	G		

**TABLE IB - PERMIT FEE RATES FOR BASIC EQUIPMENT**

<b>Equipment/Process</b>	<b>Schedule</b>	<b>Equipment/Process</b>	<b>Schedule</b>
Delayed Coking Unit Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Fractionators, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	E	Evaporator, Other	B
Deposition on Ceramics (< 5 pieces)	B	Extraction - Benzene Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	C
Deposition on Ceramics (5 or more pieces)	C	Extruder	B
Desalting Unit Including, but not limited to, all or part of the following: Mixers, Pumps, Reactors, Settling Tanks, Sumps, Tanks, Vessels	C	Extrusion System (Multiple Units) Including, but not limited to, all or part of the following: Extruders	C
Die Casting Equipment	C	Fatty Acid Mfg.	C
Digester Gas Desulfurization System Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Tanks, Towers, Vessels	C	Feathers, Size Classification	A
Dip Tank, Coating	B	Feed Handling (combining conveying and loading)	D
Dip Tank, (<=3 gal/day)	B	Fermentation/Brewing Including, but not limited to, all or part of the following: Hoppers, Conveyors, Brew Kettles	C
Distillation, Other Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Fractionators, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	C	Fertilizer, Natural, Packaging/ Processing Including, but not limited to, all or part of the following: Bins, Conveyors, Bucket Elevators, Hoppers, Loading Arms, Weigh Stations	B
Drilling Rig, Crude Oil Prod.	C	Fertilizer, Synthetic, Production Including, but not limited to, all or part of the following: Bins, Conveyors, Bucket Elevators, Mixers, Dryers, Process Tanks, Reactors, Hoppers, Loading Arms, Weigh Stations	C
Drop Forge	B	Fiberglass Panel Mfg Including, but not limited to, all or part of the following: Conveyors, Mixers, Reactors, Process Tanks, Cutters	C
Dry Cleaning & Associated Control Equipment	A	Filament Winder, Rule 1401 Toxics	C
Dryer for Organic Material	C	Filament Winder, Other	B
Drying/Laundry	A	Filling Machine, Dry Powder	C
Drying, Other	B	Film Cleaning Machine	B
Emission Reduction Credits [Rule 301(c)(4) and (c)(5)]	I	Flour Handling (combining conveying, packaging, and loadout)	E
End Liner, Can	B	Flour Manufacturing (combining milling and conveying)	E
Ethylene Oxide Sterilization, Hospital	B	Flour Milling Including, but not limited to, all or part of the following: Bins, Conveyors, Bucket Elevators, Hoppers, Mills, Weigh Stations	D
Evaporation, Toxics	C		

**TABLE IB - PERMIT FEE RATES FOR BASIC EQUIPMENT**

Equipment/Process	Schedule	Equipment/Process	Schedule
Flow Coater	B	Furnace, Electric, Induction and Resistance	C
Fluid Catalytic Cracking Equipment Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Fractionators, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	H	Furnace, Frit	C
Fluid Elimination, Waste Water	B	Furnace, Galvanizing	C
Foam-in-Place Packaging	A	Furnace, Graphitization and Carbonization	C
Food Processing Grinding, Blending, Packaging, Conveying, Flavoring	C	Furnace, Heat Treating	B
Fractionation Unit Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Fractionators, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	E	Furnace, Other Metallic Operations	C
Fruit and Vegetable Treating	A	Furnace, Pot/Crucible	C
Fuel Gas Mixer	C	Furnace, Reverberatory	D
Fuel Gas, Treating Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Heat Exchangers, Knock Out Pots, Pots, Pumps, Scrubbers, Settling Tanks, Towers, Vessels	D	Furnace, Wire Reclamation	C
Fuel Storage & Dispensing Equipment (Rule 461) Including, but not limited to, all or part of the following: Storage Tanks, Dispensing Nozzles	A	Garnetting, Paper/Polyester Including, but not limited to, all or part of the following: Feeders, Conveyors, Condensers, Cutters	C
Fumigation	A	Gas Plant Including, but not limited to, all or part of the following: Accumulators, Columns, Condensers, Drums, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Re-generators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	E
Furnace, Arc	D	Gas Turbine, Landfill/Digester Gas, <0.3MW	B
Furnace, Burn-Off, Armature	C	Gas Turbine, Landfill/Digester Gas, =>0.3 MW	E
Furnace, Burn-Off, Drum	D	Gas Turbine, <=50 MW, other fuel	D
Furnace, Burn-Off, Engine Parts	C	Gas Turbine, >50 MW, other fuel	G
Furnace, Burn-Off, Paint	C	Gas Turbine, Emergency, <0.3 MW	A
Furnace, Burn-Off, Wax	C	Gas Turbine, Emergency, =>0.3 MW	C
Furnace, Burn-Off, Other	C	Gas Turbines (Microturbines only)	A
Furnace, Cupola	D	Gas-Oil Cracking Unit Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Fractionators, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	E
		Gasoline, In-line Blending Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Fractionators, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	D

**TABLE IB - PERMIT FEE RATES FOR BASIC EQUIPMENT**

<b>Equipment/Process</b>	<b>Schedule</b>	<b>Equipment/Process</b>	<b>Schedule</b>
Gasoline, Refining Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Fractionators, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	D	Grain Cleaning Including, but not limited to, all or part of the following: Air Classifiers, Bins, Conveyors, Bucket Elevators, Hoppers, Mills, Screens, Weigh Stations	C
Gasoline, Separation - Liquid Production Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Fractionators, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	D	Grain Handling (combining storage and cleaning)	E
Gasoline, Vapor Gathering System Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Fractionators, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	D	Grain Storage	C
Gasoline Blending Unit Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Heat Exchangers, Knock Out Pots, Pots, Pumps, Scrubbers, Settling Tanks, Towers, Vessels	E	Grinder, Size Reduction	B
Gasoline Fractionation Unit Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Fractionators, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	F	Groundwater Treatment System Including, but not limited to, all or part of the following: Air Strippers, Adsorbers, Process Tanks	C
Gasoline Transfer & Dispensing Facility (See Fuel Storage & Dispensing Equipment)		Gypsum, Calcining Including, but not limited to, all or part of the following: Air Classifiers, Bins, Conveyors, Bucket Elevators, Hoppers, Kilns, Weigh Stations	E
Glass Forming Machine	C	Halon/Refrigerants, Recovery and Recycling Equipment	A1
Glass Furnace < 1TPD	B	Heater, (<5 MMBTU/hr)	B
Glass Furnace, > 1 - 50 TPD Pull	D	Heater, (5 - 20 MMBTU/hr)	C
Glass Furnace, > 50 TPD Pull	E	Heater, (>20-50 MMBTU/hr)	D
		Heater, (>50 MMBTU/hr)	E
		Hot End Coating, (Glass Mfg. Plant)	B
		Hydrant Fueling, Petrol. Middle Distillate Including, but not limited to, all or part of the following: Storage Tanks, Dispensing Nozzles	D
		Hydrocarbons, Misc., Treating Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Fractionators, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	D
		Hydrogen Desulfurization (HDS) Unit Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Fractionators, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	F



**TABLE IB - PERMIT FEE RATES FOR BASIC EQUIPMENT**

Equipment/Process	Schedule	Equipment/Process	Schedule
Hydrogen Production Equipment Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Fractionators, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	F	Iodine Reaction Including, but not limited to, all or part of the following: Columns, Compressors, Condensers, Coolers, Heat Exchangers, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Tanks, Towers	C
Hydrotreating Unit Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Fractionators, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	E	Isomerization Unit Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Fractionators, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	E
IC Engine, (51-500 HP) Cogeneration	B	Jet Engine Test Facility	C
IC Engine, (> 500 HP) Cogeneration	C	Kiln, Natural Gas	C
<del>IC Engine, Emergency, 51-500 HP</del>	<del>B</del>	Landfill Condensate/Leachate Collection/Storage	B
IC Engine, Emergency, (> 500 HP)	B	Landfill Gas, Collection, (<10 Wells)	B
IC Engine, Landfill/Digester Gas	D	Landfill Gas, Collection, (10 -50 Wells)	C
IC Engine, Other, 51-500 HP	B	Landfill Gas, Collection, (> 50 Wells)	D
IC Engine, Other, >500 HP	C	Landfill Gas, Treatment	E
Impregnating Equipment	C	Lime/Limestone, Conveying Including, but not limited to, all or part of the following: Bins, Conveyors, Bucket Elevators, Hoppers, Weigh Stations	C
Incineration, Hazardous Waste	H	Liquid Separation, Other Including, but not limited to, all or part of the following: Process Tanks, Settling Tanks, Separators, Tanks	D
Incinerator, < 300 lbs/hr, Non-Hazardous	E	Liquid Waste Processing, Hazardous Including, but not limited to, all or part of the following: Air Floatation Units, Floatation Units, Filter Presses, Reactors, Process Tanks, Clarifiers, Settling Tanks, Waste Water Separators, Tanks	E
Incinerator, >=300 lbs/hr, Non-Hazardous	F	Liquid Waste Processing, Non Hazardous Including, but not limited to, all or part of the following: Air Floatation Units, Floatation Units, Filter Presses, Reactors, Process Tanks, Clarifiers, Settling Tanks, Waste Water Separators, Tanks	C
Indoor Shooting Range	B	LPG, Tank Truck Loading	D
Ink Mfg./Blending Including, but not limited to, all or part of the following: Process Tanks, Mixers	B		
Inorganic Chemical Mfg. Including, but not limited to, all or part of the following: Process Tanks, Mixers, Reactors	D		
Insecticide Separation/Mfg Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Coolers, Drums, Ejectors, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	E		

**TABLE IB - PERMIT FEE RATES FOR BASIC EQUIPMENT**

<b>Equipment/Process</b>	<b>Schedule</b>	<b>Equipment/Process</b>	<b>Schedule</b>
LPG, Treating Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Fractionators, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	D	Mercox Treating Unit Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Fractionators, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	E
LPG Distillation Unit Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Fractionators, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	E	Metal Deposition Equipment	C
Lube Oil Additive/Lubricant Mfg.	B	Metallic Mineral Production Including, but not limited to, all or part of the following: Bins, Bucket Elevators, Conveyors, Feeders, Hoppers, Crushers, Cyclones, Log Washers, Mixers, Screens, Vibrating Grizzlies, Weigh Stations	E
Lube Oil Re-refining Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Fractionators, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	D	Misc. Solvent Usage at a Premise	B
Marine Bulk Loading/Unloading System, Including, but not limited to, all or part of the following: Absorbers, Compressors, Condensers, Knock Out Pots, Pumps, Reactors, Saturators	D	Mixer, Chemicals	B
Marine Vessel Displaced Vapor Control, Including, but not limited to, all or part of the following: Absorbers, Compressors, Condensers, Knock Out Pots, Pumps, Reactors, Saturators	D	MTBE Production Facility Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Coolers, Drums, Ejectors, Heat Exchangers, Knock Out Pots, Mixers, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	F
Merichem Unit Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Fractionators, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	D	Natural Gas Dehydration Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	C
		Natural Gas Odorizers	C
		Natural Gas Stabilization Unit Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Scrubbers, Regenerators, Settling Tanks, Sumps, Tanks, Towers, Vessels	E
		Nut Roasters Including, but not limited to, all or part of the following: Bins, Conveyors, Bucket Elevators, Hoppers, Roasters, Coolers	C

**TABLE IB - PERMIT FEE RATES FOR BASIC EQUIPMENT**

Equipment/Process	Schedule	Equipment/Process	Schedule
Nut Shell Drying Including, but not limited to, all or part of the following: Bins, Conveyors, Bucket Elevators, Hoppers, Dryers, Coolers	C	Petroleum Coke Conveying Including, but not limited to, all or part of the following: Conveyors, Bins, Hoppers, Bucket Elevators	B
Oil/Water Separator (< 10,000 GPD) Including, but not limited to, all or part of the following: Oil Water Separators, Pits, Sumps, Tanks, Vessels	B	Pharmaceutical Mfg. Including, but not limited to, all or part of the following: Conveyors, Bins, Hoppers, Reactors, Process Tanks, Pelletizers, Mixers, Dryers	C
Oil/Water Separator (>= 10,000 GPD) Including, but not limited to, all or part of the following: Oil Water Separators, Pits, Sumps, Tanks, Vessels	C	Pharmaceutical Mfg. Tableting, Coating Vitamins or Herbs	C
Open-Air resin operations	A	Pipe Coating, Asphaltic	B
Oven Bakery	C	Plasma Arc Cutting	B1
Oven, Curing (Rule 1401 toxics)	C	Plastic Mfg., Blow Molding Machine	B
Oven, Other	B	Plastic/Resin Size Reduction Including, but not limited to, all or part of the following: Bins, Bucket Elevators, Conveyors, Feeders, Hoppers, Grinders, Mills, Cyclones, Screens, Weigh Stations	B
Packaging, Other	B	Plastic/Resins Reforming	C
Paint Stripping, Molten Caustic	C	Plastic/Resins Treating	C
Paper Conveying	A	Plastisol Curing Equipment	B
Paper Pulp Products	D	Polystyrene Expansion/Molding	C
Paper Size Reduction	C	Polystyrene Expansion/Packaging	C
Pavement Grinder	B	Polystyrene Extruding/Expanding	B
Pavement Heater	B	Polyurethane Foam Mfg. Including, but not limited to, all or part of the following: Coolers, Heat Exchangers, Pumps, Reactors, Mixers, Process Tanks	C
Pelletizing, Chlorine Compounds Including, but not limited to, all or part of the following: Conveyors, Bins, Hoppers, Pelletizers, Mixers, Dryers	C	Polyurethane Mfg/Production	B
Perlite Furnace	C	Polyurethane Mfg/Rebonding	B
Perlite Handling Including, but not limited to, all or part of the following: Conveyors, Bins, Hoppers, Bucket Elevators	C	Process Line, Chrome Plating (Hexavalent)	C
Pesticide/Herbicide Mfg. Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Coolers, Drums, Ejectors, Heat Exchangers, Knock Out Pots, Mixers, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	E	Process Line, Chrome Plating (Trivalent)	B
Petroleum Coke Calcining Including, but not limited to, all or part of the following: Bins, Conveyors, Reactors, Mixers, Process Tanks, Kilns	F	Precious Metal, Recovery, Other	B
		Precious Metal, Recovery, Catalyst	D
		Printing Press, Air Dry	B
		Printing Press With IR, EB or UV Curing	B
		Printing Press, Other	C
		Printing Press, Screen	B
		Production, Other	B
		Railroad Car Loading/Unloading, Other	C
		Railroad Car Unloading, liquid direct to trucks	B

**TABLE IB - PERMIT FEE RATES FOR BASIC EQUIPMENT**

Equipment/Process	Schedule	Equipment/Process	Schedule
Reaction, Other	C	Semiconductor, Int. Circuit Mfg (5 or more)	C
Recovery, Other	B	Semiconductor, Photo resist (<5 pieces)	B
Refined Oil/Water Separator Including, but not limited to, all or part of the following: Oil/Water Separators, Pits, Sumps, Tanks, Vessels	B	Semiconductor, Photo resist (5 or more pieces)	C
Refrigerant Recovery/Recycling	A1	Semiconductor, Solvent Cleaning (<5 pieces)	B
Rendering Equipment, Blood Drying	C	Semiconductor, Solvent Cleaning (5 or more pieces)	C
Rendering Equipment, Fishmeal Drying	C	Sewage Sludge Composting	C
Rendering Equipment, Rendering	D	Sewage Sludge Drying, Conveying, Storage, Load-out Including, but not limited to, all or part of the following: Conveyors, Bins, Hoppers, Bucket Elevators, Loading Arms	D
Rendering Equipment, Separation, Liquid	C	Sewage Sludge Digestion	D
Rendering Product, Handling Including, but not limited to, all or part of the following: Conveyors, Bins, Hoppers, Bucket Elevators	C	Sewage Sludge Dryer	D
Resin, Varnish Mfg. Including, but not limited to, all or part of the following: Coolers, Heat Exchangers, Pumps, Reactors, Mixers, Process Tanks	D	Sewage Sludge Incineration	H
Roller Coater	B	Sewage Treatment, (<= 5 MGD), Aerobic Including, but not limited to, all or part of the following: Air Floatation Units, Floatation Units, Filter Presses, Clarifiers, Settling Tanks, Trickling Filters, Waste Water Separators, Tanks	C
Rubber Mfg. Including, but not limited to, all or part of the following: Coolers, Heat Exchangers, Pumps, Reactors, Mixers, Process Tanks	C	Sewage Treatment, (>5 MGD) Including, but not limited to, all or part of the following: Air Floatation Units, Floatation Units, Filter Presses, Clarifiers, Settling Tanks, Trickling Filters, Waste Water Separators, Tanks	F
Rubber Presses or Molds with a ram diameter of more than 26 inches Submitted before September 11, 1999 Submitted on or after September 11, 1999	A B	Sewage Treatment, (> 5 MGD), Anaerobic Including, but not limited to, all or part of the following: Air Floatation Units, Floatation Units, Digesters, Filter Presses, Clarifiers, Settling Tanks, Trickling Filters, Waste Water Separators, Tanks	G
Rubber Roll Mill	B	Sheet Machine	B
Sand Handling Equipment, Foundry Including, but not limited to, all or part of the following: Conveyors, Bins, Hoppers, Bucket Elevators	C	Shell Blasting System	B
Sand Handling Equipment w/Shakeout, Foundry Including, but not limited to, all or part of the following: Conveyors, Bins, Hoppers, Bucket Elevators	D	Shipping Container System	B
Screening, Green Waste	A	Sintering	C
Screening, Other Including, but not limited to, all or part of the following: Screens, Conveyors, Bins, Hoppers, Bucket Elevators	C		
Semiconductor, Int. Circuit Mfg (<5 pieces)	B		

**TABLE IB - PERMIT FEE RATES FOR BASIC EQUIPMENT**

Equipment/Process	Schedule	Equipment/Process	Schedule
Size Reduction, Other Including, but not limited to, all or part of the following: Bins, Bucket Elevators, Conveyors, Dryers, Feeders, Hoppers, Crushers, Cyclones, Mixers, Screens, Weigh Stations	C	Spent Stretford Solution Regeneration Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	D
Size Reduction, Petroleum Coke Including, but not limited to, all or part of the following: Bins, Bucket Elevators, Conveyors, Dryers, Feeders, Hoppers, Crushers, Cyclones, Mixers, Screens, Weigh Stations	C	Spray Equipment, Open	B
Sludge Dewatering, Other Including, but not limited to, all or part of the following: Filter Press, Process Tanks, Settling Tanks	D	Spray Machine, Adhesive	B
Sludge Dryer, Other	B	Spray Machine, Coating	B
Sludge Incinerator	H	Spray Machine, Powder Coating	B
Smoke Generator	B	Spraying, Resin/Gel Coat	C
Smokehouse	C	Sterilization Equipment	C
Soap/Detergent Mfg Including, but not limited to, all or part of the following: Process Tanks, Mixers, Tanks, Conveyors, Bins, Hoppers, Bucket Elevators	D	Stereolithography	A
Soil Treatment, Other Including, but not limited to, all or part of the following: Bins, Conveyors, Ovens	D	Storage, Petroleum Coke	C
Soil Treatment, Vapor Extraction Including, but not limited to, all or part of the following: Adsorbers, Afterburners	C	Storage Container, Baker-Type	B
Solder Leveling	B	Storage Container, Baker-Type w/Control	C
Soldering Machine	B	Storage Silo, Other Dry Material	A
Solvent Reclaim, Still (Multistage)	C	Storage Tank, w/o Control, Crude Oil/Petroleum Products	B
Solvent Reclaim, Still (Single stage)	A	Storage Tank, Acid with sparger	B
Solvent Redistillation Unit Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	E	Storage Tank, Ammonia with sparger	B
		Storage Tank, Asphalt <=50,000 gallons	B
		Storage Tank, Asphalt >50,000 gallons	C
		Storage Tank, Degassing Unit	D
		Storage Tank, Fixed Roof with Internal Floater	C
		Storage Tank, Fixed Roof with Vapor Control	C
		Storage Tank, Fuel Oil	A
		Storage Tank, Lead Compounds	C
		Storage Tank, LPG	A
		Storage Tank, LPG w/Vaporizing System	C
		Storage Tank, Other	A
		Storage Tank, Other w/ Control Equipment	B
		Storage Tank, with Passive Carbon s.s.	B
		Storage Tank, with Passive Carbon m.s.	C
		Storage Tank, with Passive Carbon t.s.	C

**TABLE IB - PERMIT FEE RATES FOR BASIC EQUIPMENT**

<b>Equipment/Process</b>	<b>Schedule</b>	<b>Equipment/Process</b>	<b>Schedule</b>
Storage Tank, Rendered Products	C	Thermal Cracking Unit Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Fractionators, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	E
Storage Tank, Waste Oil	A	Tire Buffer	A
Storage Tank with condenser	B	Treating, Other	B
Storage Tank, with External Floating Roof	C	Treating, Petroleum Distillates Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Fractionators, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	D
Stove-Oil Filter/Coalescer Facility	D	Vacuum Distillation Unit Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Fractionators, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	E
Striper, Can	B	Vacuum Machine	C
Striper, Pavement	B	Vacuum Metalizing	B
Stripping, Other	B	Vacuum Pumps	C
Sulfonation Including, but not limited to, all or part of the following: Absorbers, Accumulators, Columns, Compressors, Condensers, Drums, Heat Exchangers, Knock Out Pots, Pots, Pumps, Reactors, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	E	Vegetable Oil Extractor Including, but not limited to, all or part of the following: Bins, Conveyors, Cookers, Presses, Tanks, Kilns	E
Sulfuric Acid Plant Including, but not limited to, all or part of the following: Accumulators, Columns, Condensers, Drums, Heat Exchangers, Knock Out Pots, Pots, Pumps, Regenerators, Scrubbers, Settling Tanks, Sumps, Tanks, Towers, Vessels	F	Warming Device, Electric	A
Sump, Covered & Controlled	C	Waste Water Treating (< 10,000 gpd) Including, but not limited to, all or part of the following: Air Flootation Units, Flootation Units, Filter Presses, Clarifiers, Settling Tanks, Waste Water Separators, Tanks	B
Sump, Spill Containment	A	Waste Water Treating (< 20,000 gpd) no toxics Including, but not limited to, all or part of the following: Air Flootation Units, Flootation Units, Filter Presses, Clarifiers, Settling Tanks, Waste Water Separators, Tanks	B
Tablet Coating Pans	A		
Tank, Hard Chrome Plating	C		
Tank/Line, Other Chrome Plating or Chrome Anodizing	C		
Tank, Line, Other Process Emitting Hexavalent Chrome	C		
Tank/Line, Trivalent Chrome Plating	B		
Tank/Line, Cadmium or Nickel Plating	C		
Tank/Line, Other Process Emitting Nickel or Cadmium	B1		
Tank/Line, Other Plating	B		
Tank/Line Nitric Acid Process Emitting NOx	C		
Tank/Line, Other Process Using Aqueous Solutions	B		
Tank, Paint Stripping w/Methylene Chloride	C		
Textiles, Recycled, Processing	C		

**TABLE IB - PERMIT FEE RATES FOR BASIC EQUIPMENT**

<b>Equipment/Process</b>	<b>Schedule</b>
Waste Water Treating (20,000 - 50,000 gpd) Including, but not limited to, all or part of the following: Air Floatation Units, Floatation Units, Filter Presses, Clarifiers, Settling Tanks, Waste Water Separators, Tanks	D
Waste Water Treating (>50,000 gpd) Including, but not limited to, all or part of the following: Air Floatation Units, Floatation Units, Filter Presses, Clarifiers, Settling Tanks, Waste Water Separators, Tanks	E
Waste-to-Energy Equipment	H
Wet Gate Printing Equipment using Perchloroethylene	B
Weigh Station	A
Wood Treating Equipment Including, but not limited to, all or part of the following: Coater Operations, Process Tanks	C

**TABLE IIA  
SPECIAL PROCESSING FEES**

**AIR QUALITY ANALYSIS/HEALTH RISK ASSESSMENT**

<b>Schedule</b>	<b>Fee</b>
A	<del>\$1,327.34</del> <u>1,360.52</u>
B	<del>\$1,327.34</del> <u>1,360.52</u>
C	<del>\$1,327.34</del> <u>1,360.52</u>
D	<del>\$4,752.02</del> <u>4,870.82</u> + T&M
E	<del>\$4,752.02</del> <u>4,870.82</u> - + T&M
F	<del>\$4,752.02</del> <u>4,870.82</u> - + T&M
G	<del>\$4,752.02</del> <u>4,870.82</u> - + T&M
H	<del>\$6,337.16</del> <u>6,495.59</u> - + T&M

D through G: T&M = Time and Material charged at ~~\$135.91~~139.31 per hour above 35 hours.

H: T&M = Time and Material charged at ~~\$135.91~~139.31 per hour above 47 hours. Time and material charges for work beyond these hourly limits shall be for analysis or assessment required due to modification of the project or supporting analysis submitted for initial review or for multiple analyses or assessments required for a project or other special circumstances and shall be approved by the Executive Officer.

An additional fee of ~~\$2,275.42~~2,332.31 shall be assessed for a project requiring modeling review triggered by the requirements of Regulation XVII – Prevention of Significant Deterioration (PSD). The total combined fee for these reviews shall not exceed ~~\$15,169.48~~15,548.72.



**TABLE IIB  
FEE FOR PUBLIC NOTICE PUBLICATION<sup>(a)</sup>**

County	<u>FY 2017-18 Rule 212(g) Notice<sup>(a)</sup></u>	<u>FY 2017-18 Title V Notice<sup>(a)</sup></u>	<u>FY 2018-19 and thereafter Title V Notice</u>
Los Angeles	<del>\$1,422.52</del> <u>1,458.08</u>	<del>\$855.58</del> <u>1,017.28</u>	<u>\$1,180.05</u>
Orange	<del>\$1,295.62</del> <u>1,328.01</u>	<del>\$634.28</del> <u>754.16</u>	<u>\$874.83</u>
Riverside	<del>\$281.31</del> <u>288.34</u>	<del>\$301.16</del> <u>358.08</u>	<u>\$415.37</u>
San Bernardino	<del>\$1,235.45</del> <u>1,266.34</u>	<del>\$570.38</del> <u>678.18</u>	<u>\$786.69</u>

<sup>(a)</sup> If Rule 212(g) and Title V notices are combined, pursuant to Rule 212(h), only Rule 212(g) publication fee applies.

**TABLE IIC  
CEMS, FSMS, & ACEMS FEE SCHEDULE**

Certification Review		
<b>CEMS and FSMS Review<sup>1</sup></b>	<b>Basic Fee<sup>2</sup></b>	<b>Maximum Fee</b>
Any combination of pollutants, diluent, flow, or other parameter <sup>3</sup> for:		
One to two components	<del>\$3,674.58</del> <u>3,766.44</u>	<del>\$6,579.18</del> <u>6,743.66</u>
Three to four components	<del>\$4,420.23</del> <u>4,530.74</u>	<del>\$12,107.11</del> <u>12,409.79</u>
For each additional component beyond four, the following amount is added to the fee for four components	\$0.00	<del>\$2,990.68</del> <u>3,065.45</u>
For time-sharing of CEMS, the following amount is added to any fee determined above	\$0.00	<del>\$2,990.68</del> <u>3,065.45</u>
<b>ACEMS Review</b>	<b>Basic Fee<sup>4</sup></b>	<b>Maximum Fee</b>
	<del>\$3,674.58</del> <u>3,766.44</u>	<del>\$12,107.11</del> <u>12,409.79</u>

<sup>1</sup>The certification fee includes the initial application approval, approval of test protocol, and approval of the performance test results. An application resubmitted after a denial will be treated as a new application and will be subject to a new fee.

<sup>2</sup>Covers up to 40 hours evaluation time for the first two components, 60 hours for the first four components, and up to an additional 12 hours for each component beyond four. Excess hours beyond these will be charged at ~~\$162.29~~166.35 per hour, to the maximum listed in the table.

<sup>3</sup>Additional components, as necessary, to meet monitoring requirements (e.g., moisture monitor).

<sup>4</sup>Covers up to 40 hours evaluation time.

**TABLE III - EMISSION FEES**  
**For emissions in Calendar Year 2010 and thereafter**

<b>Annual Emissions (tons/yr)</b>	<b>Organic Gases* (\$/ton)</b>	<b>Specific Organics** (\$/ton)</b>	<b>Nitrogen Oxides (\$/ton)</b>	<b>Sulfur Oxides (\$/ton)</b>	<b>Carbon Monoxide (\$/ton)</b>	<b>Particulate Matter (\$/tons)</b>
4 – 25	\$589.86 <u>604.61</u>	\$105.53 <u>108.17</u>	\$345.09 <u>353.72</u>	\$409.14 <u>419.37</u>	-	\$451.05 <u>462.33</u>
>25 – 75	\$957.71 <u>981.65</u>	\$167.22 <u>171.40</u>	\$548.17 <u>561.87</u>	\$661.39 <u>677.92</u>	-	\$730.88 <u>749.15</u>
>75	\$1,433.57 <u>1,469.41</u>	\$250.81 <u>257.08</u>	\$825.56 <u>846.20</u>	\$992.98 <u>1,017.80</u>	-	\$1,094.31 <u>1,121.67</u>
≥100	-	-	-	-	\$7.06 <u>7.24</u>	-

\* Excluding methane, exempt compounds as specified in paragraph (e)(13), and specific organic gases as specified in paragraph defined in subdivision (b) of this rule.

\*\* See specific organic gases as defined in subdivision (b) of this rule.

\*\*\* ~~For July 1, 2010 through June 30, 2011 inclusive the amount of the CPI increase will be rebated.~~

**TABLE IV**  
**TOXIC AIR CONTAMINANTS AND OZONE DEPLETERS**  
**For emissions in Calendar Year 2010 and thereafter**

<b>TOXIC COMPOUNDS</b>	<b>Fee \$/1 lb</b>	<b>Annual Emission Thresholds (lbs)</b>
Ammonia (Reporting Period 07/01/04 and beyond)	\$0.03	200
Asbestos	\$6.16 <u>6.31</u>	0.0001
Benzene	\$2.08 <u>2.13</u>	2.0
Cadmium	\$6.16 <u>6.31</u>	0.01
Carbon tetrachloride	\$2.08 <u>2.13</u>	1.0
Chlorinated dioxins and dibenzofurans (26 species)	\$10.28 <u>10.54</u>	0.00002
Ethylene dibromide	\$2.08 <u>2.13</u>	0.5
Ethylene dichloride	\$2.08 <u>2.13</u>	2.0
Ethylene oxide	\$2.08 <u>2.13</u>	0.5

**Proposed Amended Rule 301 (Cont.) (Updated July 1, 2016 Amended June 2, 2017)**

<b>TOXIC COMPOUNDS</b>	<b>Fee \$/1 lb</b>	<b>Annual Emission Thresholds (lbs)</b>
Formaldehyde	<del>\$0.46</del> 0.47	5.0
Hexavalent chromium	<del>\$8.21</del> 8.42	0.0001
Methylene chloride	\$0.08	50.0
Nickel	<del>\$4.10</del> 4.20	0.1
Perchloroethylene	<del>\$0.46</del> 0.47	5.0
1,3-Butadiene	<del>\$6.16</del> 6.31	0.1
Inorganic arsenic	<del>\$6.16</del> 6.31	0.01
Beryllium	<del>\$6.16</del> 6.31	0.001
Polynuclear aromatic hydrocarbons (PAHs)	<del>\$6.16</del> 6.31	0.2
Vinyl chloride	<del>\$2.08</del> 2.13	0.5
Lead	<del>\$2.08</del> 2.13	0.5
1,4-Dioxane	<del>\$0.46</del> 0.47	5.0
Trichloroethylene	\$0.16	20.0
Chlorofluorocarbons (CFCs)	<del>\$0.40</del> 0.41 \$0.46	<del>5.0</del> ---
<u>1,1,1-trichloroethane</u>	<del>\$0.05</del> 46	<del>20.0</del> ---

**TABLE IV (cont.)**  
**~~TOXIC AIR CONTAMINANTS AND OZONE DEPLETERS~~**

<b>TOXIC COMPOUNDS</b>	<b>Fee \$/1 lb</b>	<b>Annual Emission Thresholds (lbs)</b>
<b><del>For emissions Calendar Year 2010 and thereafter</del></b>		
Chlorofluorocarbons (CFCs)	<del>\$0.40</del>	---
1,1,1 trichloroethane	\$0.05	---

**TABLE V  
ANNUAL CLEAN FUELS FEES**

<b>Volatile Organic Compounds (\$/ton)</b>	<b>Nitrogen Oxides (\$/ton)</b>	<b>Sulfur Oxides (\$/ton)</b>	<b>Particulate Matter (\$/ton)</b>
<del>\$45.96</del> <u>47.11</u>	<del>\$25.77</del> <u>26.41</u>	<del>\$31.94</del> <u>32.74</u>	<del>\$25.77</del> <u>26.41</u>

**TABLE VI  
DEMOLITION, ASBESTOS AND LEAD NOTIFICATION FEES**

<b>Demolition and Renovation by Project Size (square feet)<sup>1</sup></b>					
up to 1,000	>1,000 to 5,000	5,000 to 10,000	>10,000 to 50,000	>50,000 to 100,000	> 100,000
<del>\$59.37</del> <u>60.85</u>	<del>\$181.53</del> <u>186.07</u>	<del>\$424.95</del> <u>435.57</u>	<del>\$666.33</del> <u>682.99</u>	<del>\$965.68</del> <u>989.82</u>	<del>\$1,609.46</del> <u>1,649.70</u>

<b>Additional Service Charge Fees</b>				
<b>Revision to Notification</b>	<b>Special Handling Fee<sup>2</sup></b>	<b>Planned Renovation</b>	<b>Procedure 4 or 5 Plan Evaluation</b>	<b>Expedited Procedure 4 or 5 Fee<sup>3</sup></b>
<del>\$59.37</del> <u>60.85</u>	<del>\$59.37</del> <u>60.85</u>	<del>\$666.33</del> <u>682.99</u> 2	<del>\$666.33</del> <u>682.99</u>	<del>\$333.16</del> <u>341.49</u>

<sup>1</sup> For demolition, the fee is based on the building size.  
For refinery or chemical unit demolition, the fee is based on the structure's footprint surface area.

For renovation, the fee is based on the amount of asbestos/lead removed.

<sup>2</sup> For all notifications postmarked less than 14 calendar days prior to project start date.

<sup>3</sup> For all expedited Procedure 4 or 5 plan evaluation requests postmarked less than 14 calendar days prior to project start date.

For each subsequent notification for pre-approved Procedure 5 plan submitted per Rule 1403(d)(1)(D)(i)(V)(2).

**TABLE VII  
SUMMARY OF RECLAIM & TITLE V FEES**

Description	Rule section	FY 2017-18 Fee	FY 2018 and thereafter
<b>RECLAIM (l)</b>			
Facility Amendment Fee <b><u>with</u></b> Engineering Evaluation	(l)(5)		
• RECLAIM only		<del>\$1,021.20</del> <u>1,088.60</u>	<u>\$1,132.14</u>
• RECLAIM & Title V		<del>\$2,042.42</del> <u>2,302.81</u>	<u>\$2,540.62</u>
Facility Amendment Fee <b><u>without</u></b> Engineering Evaluation	(l)(5)		
• RECLAIM only		<del>\$1,021.20</del> <u>1,088.60</u>	<u>\$1,132.14</u>
• RECLAIM & Title V		<del>\$2,042.42</del> <u>2,302.81</u>	<u>\$2,540.62</u>
Change of Operator	(l)(7)		
• Facility Permit Amendment Fee + Application Processing Fee for Each Application		<del>\$1,021.20</del> <u>1,088.60</u> +  <del>\$594.18</del> <u>\$633.40</u>	<u>\$1,132.14</u> +  <u>\$658.74</u>
<b>Title V (m)</b>			
Administrative Permit Revision Fee	(m)(6)	\$1,021.20	<u>1,214.21</u>
Permit Revision Fee	(m)(7)		
• Minor permit revision			
• De minimis significant permit revision		<del>\$1,021.20</del> <u>1,214.21</u>	<u>\$1,408.48</u>
• Significant permit revision		<del>\$1,021.20</del> <u>1,214.21</u>	<u>\$1,408.48</u>

**Proposed Amended Rule 301 (Cont.) (~~Updated July 1, 2016~~ Amended June 2, 2017)**

		<del>\$1,021.20</del> <u>1,214.21</u>	<u>\$1,408.48</u>
Permit Renewal Fees + Final Fee if time exceeds 8 hours	(m)(8)	<del>\$2,319.52</del> <del>2,757.91</del> + <del>\$162.29</del> <u>192.96</u> <del>Per</del> <u>per</u> hour	<u>\$3,199.17</u> + <u>\$223.84</u> <del>P</del> <u>per</u> <u>hour</u>
Change of Operator <ul style="list-style-type: none"> <li>Administrative Permit Revision Fee</li> </ul>	(m)(6)	<del>\$1,021.20</del> <u>1,214.21</u>	<u>\$1,408.48</u>

## ATTACHMENT G2

(Adopted September 2, 1977)(Amended May 5, 1978)(Amended March 5, 1982)  
(Amended August 5, 1983)(Amended October 5, 1984)(Amended January 6, 1989)  
(Amended June 1, 1990)(Amended June 6, 1992)(Amended June 11, 1993)  
(Amended June 10, 1994)(Amended May 12, 1995)(Amended May 10, 1996)  
(Amended May 9, 1997)(Amended May 8, 1998)(Amended May 14, 1999)  
(Amended May 19, 2000)(Amended May 11, 2001)(Amended May 3, 2002)  
(Amended June 6, 2003)(Amended July 9, 2004)(Amended June 3, 2005)  
(Amended June 9, 2006)(Amended May 4, 2007)(Amended May 2, 2008)  
(Amended June 5, 2009)(Amended May 7, 2010)(Updated July 1, 2011)  
(Updated July 1, 2012)(Updated July 1, 2013)(Amended June 6, 2014)  
(Amended May 1, 2015)(Updated July 1, 2016)(Amended June 2, 2017)

**Changes to the fees are effective July 1, 2016Effective July 1, 2017**

### **PROPOSED AMENDED RULE 303.      HEARING BOARD FEES**

(a) Filing and Appearance Fees

- (1) Every applicant or petitioner in a proceeding before the Hearing Board shall pay to the Clerk of the Board, at the time of filing, a filing fee for each petition in accordance with the schedule set forth in Table III.
- (2) If the hearing runs more than one day, supplemental appearance fees shall be assessed pursuant to Table III for each additional day of the hearing, unless otherwise ordered by the Hearing Board.

(b) Filing Fee Refunds

- (1) In the event the Hearing Board reverses in total an appealed decision of the Executive Officer, the filing fee specified in subdivision (a) shall be refunded to the petitioner.
- (2) In the event that the petition is withdrawn, and the petitioner notifies the Clerk of the Board in writing not less than four (4) days prior to the scheduled appearance, or the hearing is not held for any other reason, the petitioner shall be entitled to a refund of fifty percent (50%) of the filing fees.

(c) Publication Fees

Every petitioner for relief which requires published notice shall pay to the Clerk of the Board a fee to cover the actual cost of publication of notice(s) of hearing. The fee shall be due and payable within fifteen (15) days of the notification in writing of the amount due.

(d) Excess Emission Fee

- (1) Each applicant or petitioner for a variance from these Rules and Regulations shall pay to the Clerk of the Board, in addition to the filing fees required in subdivision (a) an emission fee in accordance with the schedule set forth in Table I, based on the total emissions discharged during the variance period in excess of that allowed by these rules or permit conditions, other than those described in subdivision (e) below. If the amount of the excess emission fee is less than that specified in subdivision (f), the applicant or petitioner shall pay the higher amount, unless otherwise ordered by the Hearing Board.
- (2) In cases where the Hearing Board determines that calculations or estimations of excess emissions cannot be made, the petitioner shall pay the amount set forth in subdivision (f), unless otherwise ordered by the Hearing Board.
- (3) In the event that more than one rule and/or permit condition limiting the discharge of the same contaminant is violated, the excess emission fee shall be based on the excess emissions resulting from the violation of the most stringent rule or permit condition. For the purposes of this subdivision, opacity rules and particulate mass emissions shall not be considered rules limiting the discharge of the same contaminant.

(e) Excess Visible Emission Fee

Each applicant or petitioner for a variance from Rule 401 and/or Health and Safety Code Section 41701 shall pay to the Clerk of the Board, in addition to the filing fees required in subdivision (a) above, and the excess emission fees required in (d) above (if any), an emission fee based on the difference between the percent opacity allowed by Rule 401 and/or Health and Safety Code Section 41701 and the percent opacity of the emissions allowed under the variance. Such fees shall be calculated in accordance with the schedule set forth in Table II.

(f) Minimum Excess Emission Fees

The excess emission fee remitted, regardless of calculations, shall be no less than ~~\$181.49~~186.03 for each day on which the excess emissions occur or are expected to occur at each facility during the variance period, unless otherwise ordered by the Hearing Board.



(g) Adjustment of Excess Emission Fees

The Hearing Board may adjust the excess emission fee required by subdivisions (d), (e), and (f) of this rule, at the request of the petitioner or upon motion of the Hearing Board, based on evidence regarding emissions presented at the time of the hearing.

(h) Eligibility as a Small Business and Eligibility for Table III Schedule A Fees

(1) Petitioners that are individuals or that meet the definition of Small Business as set forth in Rule 102- Small Business or that meet the gross annual receipts criterion for small businesses shall be assessed twenty percent (20%) of the fees required by subdivisions (d), (e), or (f), whichever is applicable.

(2) A request for eligibility as a small business, individual, or entity that meets the total annual gross receipts criterion for small businesses in Rule 102 shall be made by the petitioner under penalty of perjury on a declaration form provided by the Executive Officer, which shall be submitted to the Clerk of the Board at the time of filing of a petition for a variance.

(i) Group Variance Fees

(1) Petitioners filing as a group for a variance shall jointly pay the total filing fee specified in Table III. Each petitioner shall individually pay excess emission fees for their facility or product(s), as specified in subdivisions (d), and (e), or (f) whichever is applicable.

(2) The Publication Fee required by subdivision (c) shall be totaled and divided equally among the petitioners.

(j) Adjustment of Fees

If, after the term of a variance for which emission fees have been paid, petitioner can establish, to the satisfaction of the Executive Officer, that (1) emissions were less than those upon which the fee was based, or (2) excess emission fee calculations are otherwise incorrect, a pro rata refund shall be made. If the amount of the excess emissions fee is less than that specified in subdivision (f), the applicant or petitioner shall pay the higher amount, unless otherwise ordered by the Hearing Board.

(k) Fee Payment/Variance Revocation

- (1) Excess emission fees required by subdivisions (d), (e), and (f) shall be due and payable to the Clerk of the Board within fifteen (15) days of notification in writing that the fees are due, unless otherwise ordered by the Hearing Board.
- (2) Failure to pay any assessed fees within fifteen (15) days of written notification that fees are due may be cause for the Hearing Board to issue further orders as may be appropriate, including but not limited to revocation of a variance. Such notification may be given by personal service or by deposit, postpaid, in the United States mail, and shall be due fifteen (15) days from the date of personal service or mailing. For the purpose of this rule, the fee payment shall be considered to be received by the District if it is postmarked by the United States Postal Service on or before the expiration date stated on the fee billing notice. If the expiration date falls on a Saturday, Sunday, or a state holiday, the fee payment may be postmarked on the next business day with the same effect as if it had been postmarked on the expiration date.

(l) Request for Time Extension of Payment Due

Whenever this rule requires fees to be paid by a certain date, the petitioner may, for good cause, request the Executive Officer to grant an extension of time, not to exceed ninety (90) days, within which the fees shall be paid. Any request for extension of time shall be presented in writing, and accompanied by a statement of reasons demonstrating good cause as to why the extension should be granted.

(m) Discretionary Powers

Any person may allege that payment of any of the fees within this rule, excluding publication fees, will cause an unreasonable hardship or is otherwise inequitable. Such petitioner may be excused from payment of such fees or a portion thereof by order of the Hearing Board if the Board, in its discretion, determines after hearing evidence thereon that payment of such fees would cause financial or other unreasonable hardship to the petitioner or is otherwise inequitable. The Hearing Board, on its own motion, may also waive all or any portion of any fee(s) except the Publication Fee.

(n) Transcript Fees

Any person requesting a transcript of the hearing shall pay the cost of such transcript. The parties to hearings and pre-hearing proceedings may be directed by the Hearing Board to pay the cost of transcripts necessary for the Hearing Board's determination of the matter, in such proportion as the Hearing Board may order.

(o) Government Agencies

- (1) This rule shall not apply to petitions filed by the Executive Officer.
- (2) Federal, state or local government agencies or public districts shall pay all fees.

(p) Waiver of Fees

All fees associated with this rule shall be waived for any petition for a variance filed as the direct and proximate result of any event declared to be a "state of emergency" by local, state, or federal authorities.

(q) Service Charge for Returned Check

Any person who submits a check to the District that is returned due to insufficient funds, or for which that person issues instructions to stop payment on the check, absent an overcharge or other legal entitlement to withhold payment, shall be subject to a \$25.00 service charge.

(r) Effective Date of Fee Schedules

Appearance and excess emission fees shall be those in effect at the time of the hearing dates.

**TABLE I**  
**SCHEDULE OF EXCESS EMISSIONS FEES**

<b><u>Air Contaminants</u></b>	<b><u>Dollars Per Ton</u></b>
Organic gases, except methane and those containing sulfur	<del>\$5,730.46</del> <u>5873.72</u>
Carbon Monoxide	<del>\$56.10</del> <u>57.50</u>
Oxides of nitrogen (expressed as nitrogen dioxide)	<del>\$3,437.82</del> <u>3,523.77</u>
Gaseous sulfur compounds (expressed as sulfur dioxide)	<del>\$4,009.02</del> <u>4,109.25</u>
Particulate matter	<del>\$4,009.02</del> <u>4,109.25</u>
Ammonia	\$0.11
Asbestos	<del>\$25.29</del> <u>25.92</u>
Benzene	<del>\$8.44</del> <u>8.65</u>
Cadmium	<del>\$25.29</del> <u>25.92</u>
Carbon tetrachloride	<del>\$8.44</del> <u>8.65</u>
Chlorinated dioxins and dibenzofurans (26 species)	<del>\$42.10</del> <u>43.15</u>
Ethylene dibromide	<del>\$8.44</del> <u>8.65</u>
Ethylene dichloride	<del>\$8.44</del> <u>8.65</u>
Ethylene oxide	<del>\$8.44</del> <u>8.65</u>
Formaldehyde	<del>\$1.77</del> <u>1.81</u>
Hexavalent chromium	<del>\$33.66</del> <u>34.50</u>
Methylene chloride	<del>\$0.40</del> <u>0.41</u>
Nickel	<del>\$16.73</del> <u>17.15</u>
Perchloroethylene	<del>\$1.77</del> <u>1.81</u>
1,3-Butadiene	<del>\$25.29</del> <u>25.92</u>
Inorganic arsenic	<del>\$25.29</del> <u>25.92</u>
Beryllium	<del>\$25.29</del> <u>25.92</u>
Polynuclear aromatic hydrocarbons (PAHs)	<del>\$25.29</del> <u>25.92</u>
Vinyl chloride	<del>\$8.44</del> <u>8.65</u>
Lead	<del>\$8.44</del> <u>8.65</u>
1,4-Dioxane	<del>\$1.77</del> <u>1.81</u>
Trichloroethylene	<del>\$0.72</del> <u>0.74</u>

**TABLE II**  
**SCHEDULE OF EXCESS VISIBLE EMISSION FEE**

For each source with opacity emissions in excess of twenty percent (20%), the fee is calculated as follows:

$$\text{Fee} = (\text{Opacity* equivalent} - 20) \times \text{number of days on which the violation is expected to occur} \times \$9.489.72$$

For each source with opacity emissions in excess of forty percent (40%) (where the source is exempt from Rule 401 and in violation of California Health and Safety Code Section 41701), the fee is calculated as follows:

$$\text{Fee} = (\text{Opacity* equivalent} - 40) \times \text{number of days on which the violation is expected to occur} \times \$9.489.72$$

\* Where "Opacity" equals maximum opacity of emissions in percent (not decimal equivalent) allowed by the variance. Where the emissions are darker than the degree of darkness equivalent to the allowed Ringelmann number, the percentage equivalent of the excess degree of darkness shall be used as "opacity."

**TABLE III - FILING FEE SCHEDULE**

Filing and supplemental fees shall be paid by the petitioner as follows:

Schedule A shall apply to -

- (1) small businesses as defined by Rule 102,
- (2) individual persons, and
- (3) entities that meet the total annual gross receipts criterion for small businesses in Rule 102.

Schedule B - shall apply to - all others.

	Schedule B	Schedule A
<b>VARIANCE (Interim, Short, Regular, Emergency) and Alternate Operating Condition(s)</b>		
<input type="checkbox"/> Interim and Short or Interim and Regular	<del>\$1,485.42</del> <u>1,522.56</u>	<del>\$266.40</del> <u>273.06</u>
<input type="checkbox"/> Short (without interim)	<del>\$1,188.35</del> <u>1,218.06</u>	<del>\$266.40</del> <u>273.06</u>
<input type="checkbox"/> Regular (without interim)	<del>\$1,188.35</del> <u>1,218.06</u>	<del>\$266.40</del> <u>273.06</u>
<input type="checkbox"/> Emergency or Ex Parte Emergency	<del>\$1,188.35</del> <u>1,218.06</u>	<del>\$266.40</del> <u>273.06</u>
<input type="checkbox"/> Variance plus Alternate Operating Condition(s)	<del>\$1,782.51</del> <u>1,827.07</u>	<del>\$266.40</del> <u>273.06</u>
<input type="checkbox"/> Plus, for each hearing day in addition to the first hearing day necessary to dispose of the petition, the additional sum of	<del>\$665.38</del> <u>682.00</u>	<del>\$132.96</del> <u>136.28</u>

<b>PRODUCT VARIANCE</b>		
Filing Fee	<del>\$1,782.51</del> <u>1,827.07</u>	<del>\$266.40</del> <u>273.06</u>
Plus, for each hearing day in addition to the first hearing day necessary to dispose of the petition, the additional sum of	<del>\$665.37</del> <u>682.00</u>	<del>\$132.96</del> <u>136.28</u>

<b>GROUP VARIANCE</b>		
Two	<del>\$1,336.90</del> <u>1,370.32</u>	
Three	<del>\$2,079.60</del> <u>2,131.59</u>	
Four or More	<del>\$2,970.88</del> <u>3,045.15</u>	
Plus, for each hearing day in addition to the first hearing day necessary to dispose of the petition, the additional sum of	<del>\$998.11</del> <u>1,023.06</u>	

**Proposed Amended Rule 303 (Cont.) (~~Updated~~ ~~Amended July 1, 2016~~ June 2, 2017)**

	Schedule B	Schedule A
<b>MODIFICATION OF EXISTING ORDERS INCLUDING FINAL COMPLIANCE DATE</b>		
<input type="checkbox"/> Modification of a Final Compliance Date and Extension of a Variance	<del>\$1,188.35</del> <u>1,218.06</u>	<del>\$266.40</del> <u>273.06</u>
<input type="checkbox"/> Modification of Order for Abatement (requested by respondent)	<del>\$1,188.35</del> <u>1,218.06</u>	<del>\$266.40</del> <u>273.06</u>
Plus, for each hearing day in addition to the first hearing day necessary to dispose of the petition, the additional of	<del>\$665.37</del> <u>682.00</u>	<del>\$132.96</del> <u>136.28</u>

<b>MODIFICATION OF EXISTING ORDERS EXCLUDING FINAL COMPLIANCE DATE</b>		
<input type="checkbox"/> Modification of Variance (Increments of Progress and Conditions)	<del>\$887.55</del> <u>909.74</u>	<del>\$266.40</del> <u>273.06</u>
<input type="checkbox"/> Interim Authorization (Increments of Progress)	<del>\$887.55</del> <u>909.74</u>	<del>\$266.40</del> <u>273.06</u>
Plus, for each hearing day in addition to the first hearing day necessary to dispose of the petition, the additional sum of	<del>\$286.64</del> <u>293.81</u>	

<b>ADMINISTRATIVE TYPE OF HEARINGS</b>		
<input type="checkbox"/> Administrative Hearings (issuance of subpoenas, waiver of fees, etc.)	<del>\$887.55</del> <u>909.74</u>	<del>\$266.40</del> <u>273.06</u>
Plus, for each hearing day in in addition to the first hearing day necessary to dispose of the petition, the additional sum of	<del>\$297.10</del> <u>304.53</u>	<del>\$132.96</del> <u>136.28</u>

<b>APPEAL</b>		
Filing fee	<del>\$1,782.51</del> <u>1,827.07</u>	<del>\$266.40</del> <u>273.06</u>
Plus, for each hearing day in addition to the first hearing day necessary to dispose of the petition, the additional sum of	<del>\$998.11</del> <u>1,023.06</u>	<del>\$195.31</del> <u>200.19</u>

<b>CONSENT CALENDAR</b>		
Filing Fee	<del>\$410.69</del> <u>420.96</u>	<del>\$132.96</del> <u>136.28</u>
Plus, for each hearing day in addition to the first hearing day necessary to dispose of the petition, the additional sum of	<del>\$259.96</del> <u>266.46</u>	<del>\$132.96</del> <u>136.28</u>
<input type="checkbox"/> In the event that the Board determines that there was insufficient documentation to consider the matter on the Consent Calendar, and the matter is scheduled for a hearing before the Board, petitioner shall pay an additional sum of	<del>\$742.72</del> <u>761.29</u>	<del>\$266.40</del> <u>273.06</u>
Plus, for each hearing day in addition to the first hearing day necessary to dispose of the petition, the additional sum of	<del>\$665.37</del> <u>682.00</u>	<del>\$132.96</del> <u>136.28</u>

### **ATTACHMENT G3**

(Adopted October 7, 1977)(Amended March 5, 1982)(Amended January 14, 1983)  
(Amended September 16, 1983)(Amended April 5, 1985)(Amended May 1, 1987)  
(Amended June 5, 1987)(Amended June 3, 1988)(Amended December 2, 1988)  
(Amended January 6, 1989)(Amended July 6, 1990)(Amended December 6, 1991)  
(Amended June 6, 1992)(Amended October 2, 1992)(Amended June 11, 1993)  
(Amended June 10, 1994)(Amended May 10, 1996)(Amended May 9, 1997)  
(Amended May 8, 1998)(Amended May 14, 1999)(Amended May 19, 2000)  
(Amended May 11, 2001)(Amended May 3, 2002)(Amended June 6, 2003)  
(Amended July 9, 2004)(Amended June 3, 2005)(Amended June 9, 2006)  
(Amended May 4, 2007)(Amended May 2, 2008)(Amended June 5, 2009)  
(Amended May 7, 2010)(Amended May 6, 2011)(Updated July 1, 2012)  
(Updated July 1, 2013)(Amended June 6, 2014)(Amended May 1, 2015)  
(Updated July 1, 2016)(Amended June 2, 2017)

~~Changes to the fees are effective July 1, 2016~~Effective July 1, 2017

#### **PROPOSED AMENDED RULE 304. EQUIPMENT, MATERIALS, AND AMBIENT AIR ANALYSES**

- (a) Whenever the Executive Officer finds that an analysis of the materials used by, or the emissions from, any source is necessary to determine the extent and amount of pollutants being discharged to the atmosphere, he may order the testing of such sources.
- (b) Whenever the Executive Officer has reasonable cause to believe that air pollutants being discharged into the atmosphere from any source may be contrary to any permit condition or any state or local law, order, rule, or regulation relating to air pollution, or may be endangering the comfort, repose, health, or safety of a considerable number of persons, or the public, he may order the testing of the ambient air which may be affected.
- (c) After the Executive Officer determines that ambient air testing should be conducted and that the source should be assessed fees to pay for such testing, and that the test has begun, he shall within two working days advise the source of the basis upon which the finding of reasonable cause was made, the pollutants being tested for, the duration of testing, and the estimated fees.
- (d) Testing will be accomplished by the collection of samples and the analyses of such samples by qualified personnel of the South Coast Air Quality Management District, continuous automatic recording ambient monitoring by a District van,



device, facility or an independent testing laboratory under contract to the District. Alternatively, the Executive Officer may require (or the owner/operator of the source may, with the approval of the Executive Officer, elect) that testing be performed by an approved independent testing laboratory, that meets the criteria in subdivision (k). Such testing shall be done using procedures and methods and under conditions prescribed by the Executive Officer. Where tests are performed by an approved independent testing laboratory, the Executive Officer may require that sampling and/or testing be witnessed by qualified District personnel at the fee rate of ~~\$128.44~~\$131.31 per person per hour or prorated portion thereof. The owner/operator of the source shall provide to the Executive Officer a copy of all test reports, including all test data, description of test methods, analyses, and results.

- (e) The owner/operator of a source tested by District personnel or an independent testing laboratory under contract to the District shall not pay a fee for the initial test/analysis which is conducted to determine compliance with a permit condition, or any state or local law, order, rule, or regulation relating to air pollution, unless the result of such testing indicates a violation of any state or local law, order, rule, permit condition or regulation relating to air pollution in which case the fee shall be charged to the owner/operator in accordance with the fee specified in Rule 304.1. If the initial test/analysis indicates that the source is or may be in violation of a permit condition, or any state or local law, order, rule, or regulation relating to air pollution, any subsequent test/analysis conducted in order to verify the compliance status shall also result in a fee charged to the owner/operator in accordance with the fee specified in Rule 304.1. Tests scheduled of one or more permit units to be operated under prearranged conditions, which are canceled due to a change in the permit units' prearranged operating conditions, shall result in a fee charged to the owner/operator in accordance with the fee specified in Rule 304.1. Such a fee shall not be charged if the owner/operator notifies the District of the cancellation at least 24 hours prior to the scheduled test date and time.
- (f) Fees for any test not listed in Rule 304.1 shall be determined by the Executive Officer.
- (g) Federal, state, or local government agencies or public districts shall pay all fees.
- (h) Should the estimated fees for conducting any ambient air monitoring program as described in subdivision (b) of this Rule exceed ~~\$16,302.94~~\$16,710.48, the affected

owner/operator may, within 30 days of notification, request that the program be approved by the District Board at a public hearing.

- (i) After completion of testing, the owner/operator of the source shall be notified by the District accounting office of the fees to be paid. Such fees shall be assessed for all non-compliant samples, as described in subdivision (e), which indicates that if, a source is or may be in violation of a permit condition or of any state or local law, order, rule, or regulation relating to air pollution, or when there may be any endangerment of the comfort, repose, health, or safety of a considerable number of persons or the public then, ~~and~~ a subsequent verification is required. Failure to pay any such fees within sixty (60) days after the date shown on the notice of fees due shall constitute grounds for the denial, revocation or suspension of the permits to operate at sources subject to permit requirements and shall constitute a violation of this Rule for any source, whether or not subject to permit requirements.
- (j) A small business shall pay twenty percent (20%) of the fees listed in Rule 304.1. Small business is defined in Rule 102 as "Small Business."
- (k) For the purposes of this Rule, when an independent testing laboratory is used for the purposes of establishing compliance with District rules or to obtain a District permit to operate, it must meet all of the following criteria:
  - (1) The testing laboratory shall have no financial interest in the company or facility being tested, or in the parent company or any subsidiary thereof;
  - (2) The company or facility being tested, or parent company or any subsidiary thereof, shall have no financial interest in the testing laboratory;
  - (3) Any company or facility responsible for the emission of significant quantities of pollutants to the atmosphere, or parent company or any subsidiary thereof, shall have no financial interest in the testing laboratory; and
  - (4) The testing laboratory shall not be in partnership with, own or be owned by, in part or in full, the contractor who has provided or installed equipment (basic or control), or monitoring systems, or is providing maintenance for installed equipment or monitoring systems, for the company being tested.The testing laboratory shall submit a statement certifying that it meets the above criteria with respect to the company or facility being tested.

- (l) Notwithstanding the provisions of subdivision (k), the Executive Officer, by written approval, may allow the operator of a publicly owned treatment works to conduct testing in connection with wastewater treatment or reclamation operation pursuant to this rule, if the Executive Officer determines the following:
  - (1) the operator complies with all requirements of this rule, other than subdivision (k);
  - (2) the operator submits a written self-testing plan request to the Executive Officer for certification on a method-by-method basis, in accordance with the requirements of guidelines established by the Executive Officer; and
  - (3) the operator pays a fee for the processing of the self-testing plan request at a rate of ~~\$128.14~~\$131.31 per person per hour, pursuant to Rule 306(d), so as not to exceed the amount necessary to recover the District costs.
  
- (m) The District may approve independent testing firms to perform specified analyses and tests required for compliance with District rules, regulations and permit conditions.
  - (1) Approval fees (for each method required for approval) will be assessed to cover the costs of processing the laboratory approval application and subsequent District validation of the independent firm's expertise and reliability.
  - (2) For firms located outside District boundaries, reasonable travel charges will be assessed for site visits as required as part of the approval process.
  - (3) An approved facility may renew its status by paying an annual fee per method and by complying with the original approval requirements as well as any additional approval requirements or any additional conditions.  
Fees are based on actual costs at the staff hour rate specified in paragraph (d) above and as shown in Table I.

**TABLE I**  
**LABORATORY APPROVAL PROGRAM**  
**FEE STRUCTURE**  
**(per method)**

Application Review	<del>\$170.77</del> <u>175.04</u>
Facility Inspection (if required)	<del>\$128.11</del> <u>131.31</u> / hour up to <del>\$375.48</del> <u>384.87</u> additional
Audit Sample (if required)	<del>\$170.77</del> <u>175.04</u> / hour up to <del>\$500.60</del> <u>513.12</u> additional
Annual Renewal	<del>\$170.77</del> <u>175.04</u>
Method Equivalence	<del>\$170.77</del> <u>175.04</u> / hour up to <del>\$815.07</del> <u>835.45</u> additional

## **ATTACHMENT G4**

(Adopted May 1, 1987)(Amended June 7, 1991)(Amended June 6, 1992)  
(Amended June 10, 1994)(Amended May 10, 1996)(Amended May 9, 1997)  
(Amended May 8, 1998)(Amended May 14, 1999)(Amended May 19, 2000)  
(Amended May 11, 2001)(Amended May 3, 2002)(Amended June 6, 2003)  
(Amended July 9, 2004)(Amended June 3, 2005)(Amended June 9, 2006)  
(Amended May 4, 2007)(Amended May 2, 2008)(Amended May 7, 2010)  
(Amended May 6, 2011)(Updated July 1, 2012)(Updated July 1, 2013)  
(Amended June 6, 2014)(Amended May 1, 2015)(Updated July 1, 2016)  
(Amended June 2, 2017)

**Changes to the fees are effective July 1, 2016Effective July 1, 2017**

### **PROPOSED AMENDED RULE 304.1 ANALYSES FEES**

Analyses fees for testing pursuant to Rule 304.

(a) Laboratory Analyses Fees

	<u>Type of Test</u>	<u>Fee</u>
(1)	Particle Analysis	
(A)	Microscopic Identification	<del>\$128.44</del> <u>131.31</u> / hour of analysis
(B)	Micro-Fourier Transform Infrared Spectroscopy	<del>\$189.89</del> <u>194.64</u> / particle
(C)	X-Ray Diffraction	<del>\$189.89</del> <u>194.64</u> / sample
(D)	Particle Size Determination	
(i)	by microscopy	<del>\$128.44</del> <u>131.31</u> / hour of analysis
(ii)	by sieve	<del>\$128.44</del> <u>131.31</u> / sample
(E)	Energy Dispersive X-Ray - microprobe	As charged by outside laboratory (charge pass through)
(2)	Asbestos (Bulk Samples)	
(A)	PLM	<del>\$128.44</del> <u>131.31</u> / sub-sample
(B)	Point Counting	<del>\$128.44</del> <u>131.31</u> / sub-sample
(C)	TEM, Quantitative	As charged by outside laboratory (charge pass through)
(D)	TEM, Qualitative	As charged by outside laboratory (charge pass through)
(E)	X-Ray Diffraction	<del>\$283.05</del> <u>290.13</u> / sub-sample and/or layer

**Proposed Amended Rule 304.1 (Cont.) (Updated July 1, 2016 Amended June 2, 2017)**

	<u>Type of Test</u>	<u>Fee</u>
(3)	Asbestos (Bulk Samples)	
(A)	TEM - 12-hour turnaround	As charged by outside laboratory (charge pass through)
(B)	TEM - 1-day turnaround	As charged by outside laboratory (charge pass through)
(C)	TEM - 2-day turnaround	As charged by outside laboratory (charge pass through)
(4)	Vapor Pressure Tests	
(A)	Reid Vapor Pressure	<del>\$85.22</del> <u>87.35</u> / sample
(B)	Isoteniscope	As charged by outside laboratory (charge pass through)
(C)	Speciation of Components in each sample	<del>\$358.62</del> <u>367.59</u> for five or fewer compounds <del>\$42.55</del> <u>43.61</u> for each additional compound
(D)	Calculation	<del>\$250.23</del> <u>256.49</u> / sample
(5)	Fuel Analysis	
(A)	Metals (Pb in gasoline)	<del>\$256.17</del> <u>262.57</u> / sample <del>\$33.82</del> <u>34.67</u> for each additional sample
(B)	Ash	As charged by outside laboratory (charge pass through)
(C)	Water and Sediment	As charged by outside laboratory (charge pass through)
(D)	Density	<del>\$128.11</del> <u>131.31</u> / sample
(E)	Heat Content	As charged by outside laboratory (charge pass through)
(F)	Water	As charged by outside laboratory (charge pass through)
(G)	Bromine Number	As charged by outside laboratory (charge pass through)
(H)	Sulfur	
(i)	In Fuel Gas	<del>\$298.99</del> <u>306.46</u> / sample
(ii)	In Fuel Oil (by XRF)	<del>\$102.12</del> <u>104.67</u> / sample

**Proposed Amended Rule 304.1 (Cont.) (Updated July 1, 2016 Amended June 2, 2017)**

	Type of Test	Fee
(I)	Engler Distillation	As charged by outside laboratory (charge pass through)
(J)	Initial Boiling Point	As charged by outside laboratory (charge pass through)
(6)	VOC (Regulation XI)	
(A)	Gravimetric Test	<del>\$128.44</del> <u>131.31</u> / sample
(B)	Density of Coating or Distillate	<del>\$128.44</del> <u>131.31</u> / sample
(C)	Gloss Testing	<del>\$128.44</del> <u>131.31</u> / sample
(D)	Gas Chromatograph Analysis	<del>\$358.62</del> <u>367.59</u> for five or fewer com- pounds <del>\$42.55</del> <u>43.61</u> for each additional com- pound
(E)	Photochemical Reactivity -	
(i)	Unknown	<del>\$512.67</del> <u>525.49</u> / sample
(ii)	Known	<del>\$358.62</del> <u>367.59</u> / sample
(F)	Distillation -	
(i)	Normal	<del>\$102.43</del> <u>104.68</u> / sample
(ii)	Heavy Ink	<del>\$144.98</del> <u>148.60</u> / sample
(G)	Water by Karl Fischer Titration	<del>\$170.77</del> <u>175.04</u> / sample
(H)	Emission Spectrograph Analysis	<del>\$128.44</del> <u>131.31</u> / sample
(I)	Gas Chromatograph/Mass Spectrometry	<del>\$341.74</del> <u>350.25</u> for five or fewer com- pounds <del>\$33.79</del> <u>34.63</u> for each additional com- pound
(J)	VOC in pipe cements	<del>\$876.26</del> <u>898.17</u> / sample
(K)	VOC in adhesives contain- ing cyanoacrylates	<del>\$250.23</del> <u>256.49</u> / sample

**Proposed Amended Rule 304.1 (Cont.) (Updated July 1, 2016 Amended June 2, 2017)**

- (7) For Certification Tests and Analyses not listed above, the fee shall be assessed at a rate of ~~\$128.44~~131.31 per person per hour or a prorated portion thereof.
- (8) In addition to the regular analysis fee, all expedite samples which require overtime work by staff shall be charged an additional time and a half fee based on the normal hourly rate of staff performing such work beyond the normal work schedule.
- (9) Time and material fees shall be charged for all samples sent to outside laboratories.

(b) Emissions Testing and Analyses Fees

	Type of Test	Fee
(1)	Accuracy Confirmation Test of Continuous Emission Monitor	<del>\$1,298.97</del> <u>1,331.44</u>
(2)	Continuous Gaseous Emission Testing with Mobile Source Testing Vehicle	<del>\$1,692.47</del> <u>1,734.78</u> plus <del>\$145.26</del> <u>148.89</u> / hour
(3)	Non-Continuous Emission Testing	<del>\$1,589.74</del> <u>1,629.45</u> plus fee listed below:
		<u>Cost Per Sample</u>
		Specific*                      Surcharge**
(A)	Moisture	<del>\$230.54</del> <u>236.27</u> <del>\$170.77</del> <u>175.04</u>
(B)	Particulate Matter	<del>\$888.61</del> <u>910.83</u> <del>\$444.17</del> <u>455.27</u>
(C)	Sulfur Dioxide	<del>\$789.63</del> <u>809.37</u> <del>\$394.57</del> <u>404.43</u>
(D)	Oxides of Nitrogen	<del>\$393.00</del> <u>402.83</u> <del>\$119.34</del> <u>122.32</u>
(E)	Carbon Monoxide	<del>\$328.44</del> <u>336.31</u> <del>\$163.91</del> <u>168.01</u>

\* charge for first sample.

\*\* charge for each additional sample, whether at the same or a different sampling location.



**Proposed Amended Rule 304.1 (Cont.) (Updated July 1, 2016 Amended June 2, 2017)**

<u>Type of Test</u>		<u>Fee</u>	
(F)	Total Hydrocarbons	<del>\$820.29</del> <u>840.80</u>	<del>\$589.46</del> <u>604.20</u>
		<u>Cost Per Sample</u>	
		Specific*	Surcharge**
(i)	Hydrogen Sulfide	<del>\$789.63</del> <u>809.37</u>	<del>\$394.57</del> <u>404.43</u>
(ii)	Vinyl Chloride	<del>\$341.71</del> <u>350.25</u>	<del>\$251.01</del> <u>257.29</u>
(G)	Gas Chromatograph / Mass Spectrometry for Unknown	<del>\$341.71</del> <u>350.25</u> for five or fewer compounds <del>\$33.79</del> <u>34.63</u> for each additional compound	
(H)	High Volume Sampler (Fugitive Dust)	<del>\$697.36</del> <u>714.79</u>	<del>\$348.60</del> <u>357.32</u>
(I)	Total Reduced Sulfur Compounds***	<del>\$548.77</del> <u>562.49</u>	<del>\$84.31</del> <u>86.42</u>
(J)	Sample Preparation	<del>\$42.55</del> <u>43.61</u>	<del>\$25.34</del> <u>25.97</u>

(c) Ambient Air Analyses Fees

(1) Automatic-Recording Ambient Air or Atmospheric Monitoring at a Fixed Site

<u>Type of Test</u>		<u>Fee</u>
(A)	Installation of One (1) Wind-Monitoring System at One (1) Site.	<del>\$854.53</del> <u>875.89</u>
(B)	Installation of Each Additional Wind-Monitoring System at the Same Site as (A).	<del>\$256.18</del> <u>262.58</u>

\* charge for first sample.

\*\* charge for each additional sample, whether at the same or a different sampling location.

\*\*\* The Non-Continuous Emission Testing Fee will only be charged if SCAQMD personnel perform the sampling. In the case where the samples are taken by contractor personnel (for compliance) or facility staff (for information only), only the sample analysis fee is applicable.

**Proposed Amended Rule 304.1 (Cont.) (Updated July 1, 2016 Amended June 2, 2017)**

- (C) Operation of One (1) Wind-Monitoring System At One (1) Site, Including Data Reduction. ~~\$170.77~~175.04 / day
- (D) Operation of Each Additional Wind-Monitoring System at Same Site as (C), Including Data Reduction. ~~\$59.74~~61.23 / day
- (2) Continuous Automatic-Recording Ambient Monitoring In Mobile Mode
  - (A) Installation of One (1) Instrument and Wind Monitoring System in Mobile Van. ~~\$1,196.71~~1,226.63
  - (B) Installation of Additional Instrument in Mobile Van. ~~\$427.11~~437.79
  - (C) Operation of One (1) Instrument and Wind-Monitoring System in Mobile Mode, 10 Hours Per Day, Weekdays Only. ~~\$649.51~~665.75 / day
  - (D) Operation of One (1) Instrument and Wind-Monitoring System In Mobile Mode, 10 Hours Per Day, Weekends and Holidays. ~~\$974.34~~998.70 / day
  - (E) Operation of Each Additional Instrument, Other Than Those Already Installed, in Mobile Van. ~~\$59.74~~61.23 / day
- (3) Continuous Non-Recording Ambient Sampling With Laboratory Analysis of Sample Collected (Weekdays Only).
  - (A) Installation of One (1) 24-Hour Sampler (Bag- or Sequential-Impinger). ~~\$854.53~~875.89 plus lab analysis
  - (B) Installation of Each Additional 24-Hour Sampler. ~~\$683.59~~700.68 plus lab analysis
  - (C) Operation of One (1) 24-Hour Sampler and Analysis for One (1) Contaminant Per Sample. ~~\$299.03~~306.51 / day  
~~\$68.02~~69.72 for each additional contaminant
  - (D) Operation of Each Additional 24-Hour Sampler and Analysis for Same Contaminant in (C). ~~\$110.90~~113.67 / day  
~~\$50.98~~52.25 for each additional contaminant
  - (E) Operation of 24-Hour, Sequential-Impinger Sampler and Spectrophotometric Analysis. ~~\$598.19~~613.14 / day for up to 12 samples  
~~\$256.18~~262.58 for each additional set of 12 samples

**Proposed Amended Rule 304.1 (Cont.) (Updated July 1, 2016 Amended June 2, 2017)**

(F)	Installation of One (1) Non-Sequential Sampler to Collect Less-Than-24-Hour Samples.	<del>\$1,025.46</del> <u>1,051.10</u>
(G)	Operation of One (1) Non-Sequential Sampler to Collect Less-Than-24-Hour Samples For One Contaminant.	<del>\$512.81</del> <u>525.63</u> / day
(H)	Sample Preparation or Extraction Prior to Analysis.	<del>\$170.77</del> <u>175.04</u> / day for up to 12 samples
(I)	Spectrophometric Analysis of Each Sample Collected in (G) From Any Number of Samplers Operated for Same Project on Same Day.	<del>\$85.22</del> <u>87.35</u> for first sample or contaminant <del>\$33.79</del> <u>34.63</u> for each additional sample or contaminant
(K)	Analysis of Each Sample Collected in (G) For Particulates.	<del>\$102.12</del> <u>104.67</u> for first sample <del>\$59.64</del> <u>61.13</u> for each additional sample
(L)	Gas Chromatograph/Mass Spectrometry Identification For Any Sample Collected Above.	<del>\$170.77</del> <u>175.04</u> for five or fewer contaminants <del>\$16.89</del> <u>17.31</u> for each additional contaminant
(M)	Additional Fees for Sample Pick-up and Analysis After Normal Weekday Working Hours.	<del>\$85.22</del> <u>87.35</u> additional / hour for each hour exceeding 8-hour normal week day for sample pick-up or collection <del>\$1,367.49</del> <u>1,401.68</u> additional / day for weekends and holidays requiring sample pick-up and analysis same day <del>\$1,709.53</del> <u>1,752.27</u> additional / day for weekends and holidays requiring manual sample collection and analysis same day
(4)	Meteorological Monitoring	
(A)	Conduct Upper-Air Observation via Radio or Airsonde.	<del>\$598.21</del> <u>613.17</u>

**Proposed Amended Rule 304.1 (Cont.) (Updated July 1, 2016 Amended June 2, 2017)**

- |     |   |   |
|-----|---|---|
| (B) | Conduct Low-Level Air Observation via Tethersonde (8 Hour Program).   | <del>\$3,422.35</del> <u>3,507.91</u>           |
| (C) | Conduct Pilot Balloon Observation (Pibal).  | <del>\$3,422.35</del> <u>3,507.91</u> / release |
| (5) | Landfill Integrated Surface Sampling Program, per Rule 1150.1 Guidelines  |   |
| (A) | Conduct Less-Than 24-Hour, Integrated-Surface-Sampling Program Over three (3) 50,000 Square-Foot Grids. Program Includes: Installation and Operation of Wind-Monitoring System; Set-Up of Sample Grid Areas; Conduct of Sampling Sweeps; and Analysis for One (1) Contaminant Per Sample Bag. | <del>\$2,564.35</del> <u>2,628.46</u> / grid    |
| (B) | Conduct Less-Than-24-Hour, Integrated-Landfill-Surface-Sampling Program Over Each Additional 50,000 Square-Foot Grid At The Same Site as (A).   | <del>\$555.34</del> <u>569.22</u>               |
| (6) | SF6 Gas-Tracer Study  |   |
| (A) | Conduct SF6 Gas-Tracer Study With Up to Sixty (60) Samples, Including Installation and Operation of a Wind-Monitoring System and Tethersonde Observations.  | <del>\$18,806.44</del> <u>19,276.60</u>         |
| (B) | Collection and Analysis of Each Additional Sample for (A).  | <del>\$85.22</del> <u>87.35</u>                 |

## **ATTACHMENT G5**

(Adopted January 4, 1985)(Amended June 5, 1987)(Amended June 3, 1988)  
(Amended January 6, 1989)(Amended November 3, 1989)(Amended July 6, 1990)  
(Amended June 11, 1993)(Amended June 10, 1994)(Amended May 12, 1995)  
(Amended May 10, 1996)(Amended May 9, 1997)(Amended May 8, 1998)  
(Amended May 14, 1999)(Amended May 19, 2000)(Amended May 11, 2001)  
(Amended May 3, 2002)(Amended June 6, 2003)(Amended July 9, 2004)  
(Amended June 3, 2005)(Amended June 9, 2006)(Amended May 4, 2007)  
(Amended May 2, 2008)(Amended June 5, 2009)(Amended May 7, 2010)  
(Updated July 1, 2011)(Updated July 1, 2012)(Updated July 1, 2013)  
(Amended June 6, 2014)(Amended May 1, 2015)(Amended May 6, 2016)  
(Updated July 1, 2016)(Amended June 2, 2017)

~~Changes to the fees are effective July 1, 2016~~Effective July 1, 2017

### **PROPOSED AMENDED RULE 306.      PLAN FEES**

(a)      Summary

California Health and Safety Code Section 40522 provides authority for the South Coast Air Quality Management District to adopt a fee schedule for the approval of plans to cover the costs of review, planning, inspection, and monitoring related to activities conducted pursuant to the plans. An annual fee may also be charged to cover the costs of annual review, inspection, and monitoring related thereto. This rule establishes such a fee schedule, and requires that fees be paid for:

- (1)      Filing of plans;
- (2)      Evaluation of the above plans;
- (3)      Inspections to verify compliance with the plans;
- (4)      Duplicate plans;
- (5)      Change of condition; and
- (6)      Annual review/renewal of plans, if applicable.

(b)      Definitions

For the purpose of this rule, a plan is any data and/or test report (including equipment certification source tests) required by federal or state law, or District Rules and Regulations to be submitted to the District. A plan may be a description of a method to control or measure emissions of air contaminants required by the Rules and Regulations. Plans include, but are not limited to, the following: Demonstration Plan; Application Test Plan; Implementation Plan; Compliance Plan; Management Plan; Control Plan; CEQA Mitigation Monitoring Plan; Acid Rain Repowering Extension Plan and Compliance Plan; Acid Rain Continuous

**Proposed Amended Rule 306 (Cont.)** (~~Updated July 1, 2016~~**Amended June 2, 2017**)

Emission Monitoring System Plan; Acid Rain Protocol/Report Evaluation; VOC Excavation Mitigation Plans (Site Specific and Various Locations); Reduction of Refrigerant Emissions from Stationary Refrigeration and Air Conditioning Systems Plan; Title V Exclusion Requests; Rule 109.1; Smoke Management Plans; Burn Management Plans; Emergency Burn Plans; Post Burn Evaluation Reports; Alternative Recordkeeping System Plan and Solid Waste Air Quality Assessment Test Reports (Health and Safety Code Section 41805.5); Compliance Assurance Monitoring Plan (40CFR64); Maximum Achievable Control Technology MACT Exemption Requests; Equipment Certification Source Test Reports; and MACT Case-by-Case Analysis.

(c) Plan Filing Fee

The filing fee for a plan or change of condition shall be ~~\$135.91~~ as follows:

<u>Facility Type</u>	<u>Non-Title V</u>	<u>Title V</u>
<u>FY 2017 -18</u>	<u>\$144.88</u>	<u>\$161.60</u>
<u>FY 2018-19 and thereafter</u>	<u>\$150.68</u>	<u>\$187.46</u>

(d) Plan Evaluation Fee

The plan evaluation fee shall be an amount equal to the total actual and reasonable time incurred by the District for evaluation of a plan, assessed at the rate of ~~\$135.91~~ per person per hour or prorated portion thereof, as follows:

<u>Facility Type</u>	<u>Non-Title V</u>	<u>Title V</u>
<u>FY 2017 -18</u>	<u>\$144.88</u>	<u>\$161.60</u>
<u>FY 2018-19 and thereafter</u>	<u>\$150.68</u>	<u>\$187.46</u>

(e) Duplicate Plan Fee

A request for a duplicate plan shall be made in writing by the applicant. The applicant shall pay ~~\$22.06~~ the fee as shown in the table below in this subdivision for each plan requested.:

<u>Facility Type</u>	<u>Non-Title V</u>	<u>Title V</u>
<u>FY 2017 -18</u>	<u>\$23.52</u>	<u>\$26.23</u>
<u>FY 2018-19 and thereafter</u>	<u>\$24.46</u>	<u>\$30.43</u>

**Proposed Amended Rule 306 (Cont.)** (~~Updated July 1, 2016~~**Amended June 2, 2017**)

(f) Inspection Fee

The inspection fee for plan verification shall be an amount equal to the total actual and reasonable time incurred by the District for inspection and verification of the plan, assessed at the hourly rate of ~~\$108.68~~ per inspection staff or prorated portion thereof as shown in the table below in this subdivision. For inspections conducted outside of regular District working hours, the fee shall be assessed at the rate of 150% of the above hourly rate. This subdivision shall not apply to plans subject to ~~subdivision Rule 306(h)~~.

<u>Facility Type</u>	<u>Non-Title V</u>	<u>Title V</u>
<u>FY 2017 -18</u>	<u>\$115.85</u>	<u>\$129.22</u>
<u>FY 2018-19 and thereafter</u>	<u>\$120.48</u>	<u>\$149.90</u>

(g) Change of Condition Fee

Any request for a change of condition on a VOC Excavation Mitigation Plan shall be made in writing by the applicant. A request submitted after thirty (30) days of the issuance of the plan shall be subject to additional fees assessed at the hourly rate of \$135.91 per hour shown in the table below in this subdivision for time spent ~~in evaluating~~ on of the plan. Such fees shall be imposed at the time the review is completed.

<u>Facility Type</u>	<u>Non-Title V</u>	<u>Title V</u>
<u>FY 2017 -18</u>	<u>\$144.88</u>	<u>\$161.60</u>
<u>FY 2018-19 and thereafter</u>	<u>\$150.68</u>	<u>\$187.46</u>

(h) Annual Review/Renewal Fee

An annual review/renewal fee shall be charged for plans listed in the following table in this subdivision. The annual review/renewal fee shall be an amount equal to the Rule 301(d)(2) Schedule A fee. In addition, annual reviews/renewals shall meet all relevant and applicable requirements of Rule 301(d) and 301(g), and be paid on an annual renewal date set by the Executive Officer.

Annual Review/Renewal Plan Fee by Rule Number

<u>Rule/Reference</u>	<u>Plan Type</u>
<u>410</u>	<u>Odor Monitoring</u>
<u>431.1</u>	<u>Sulfur Content of Gaseous Fuels</u>

**Proposed Amended Rule 306 (Cont.)** (~~Updated July 1, 2016~~Amended June 2, 2017)

<u>Rule/Reference</u>	<u>Plan Type</u>
<u>462</u>	<u>Organic Liquid Loading Continuous Monitoring System (CMS) Plan</u>
<u>463(e)(1)(A)</u>	<u>Organic Liquid Storage - Self-Inspection of Floating Roof Tanks</u>
<u>1118</u>	<u>Control of Emissions from Refinery Flares - Flare Minimization Plan</u>
<u>1132</u>	<u>Further Control of VOC Emissions from High-Emitting Spray Booth Facilities</u>
<u>1150</u>	<u>Excavation Management</u>
<u>1150.1.</u>	<u>Active Landfill Control of Gaseous Emissions</u>
<u>1158</u>	<u>Storage, Handling, and Transport of Coke, Coal and Sulfur - Open Pile Control Plan</u>
<u>1166</u>	<ul style="list-style-type: none"> <li>• <u>Volatile Organic Compound Emissions from Decontamination of Soil – Fixed Site</u></li> <li>• <u>Volatile Organic Compound Emissions from Decontamination of Soil - Various locations</u></li> </ul>
<u>1173</u>	<u>Control of Volatile Organic Compound Leaks and Releases from Components at Petroleum Facilities and Chemical Plants (h)(2)</u>
<u>1176</u>	<u>VOC Emissions Waste Water System</u>
<u>1407</u>	<u>Non Ferrous Metal Melting</u>
<u>1420</u>	<u>Emissions of Lead</u>
<u>1420.1</u>	<ul style="list-style-type: none"> <li>• <u>Rule– Compliance Plan</u></li> <li>• <u>Continuous Furnace Pressure Monitoring Plan</u></li> <li>• <u>Compliance Plan for Closure Activities</u></li> </ul>
<u>1469</u>	<u>Chrome Plating Operations</u>
<u>1469.1</u>	<u>Spray Coating Chromium</u>
<u>1470</u>	<u>Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines</u>
<u>40 CFR 64.7</u>	<u>Compliance Assurance Monitoring Plan</u>

<u>Plan type</u>
<del>Rule 1166 – Volatile Organic Compound Emissions from Decontamination of Soil – Various locations</del>
<del>Rule 1166 – Volatile Organic Compound Emissions from Decontamination of Soil – Fixed Site</del>



**Proposed Amended Rule 306 (Cont.) (Updated July 1, 2016 Amended June 2, 2017)**

<del>Rule 1407—Non Ferrous Metal Melting</del>
<del>Rule 1420—Emissions of Lead</del>
<del>Rule 1176—VOC Emissions Waste Water System</del>
<del>Rule 1469.1—Spray Coating Chromium</del>
<del>Rule 1469—Chrome Plating Operations</del>
<del>Rule 1470—Requirements for Stationary Diesel Fueled Internal Combustion and Other Compression Ignition Engines</del>
<del>Compliance Assurance Monitoring Plan</del>
<del>Rule 1150—Excavation Management Plan</del>
<del>Rule 1150.1. Active Landfill Control of Gaseous Emissions</del>
<del>Rule 431.1—Sulfur Content of Gaseous Fuels</del>
<del>Rule 463 (e)(1)(A)—Organic Liquid Storage—Self Inspection of Floating Roof Tanks</del>
<del>Rule 462—Organic Liquid Loading Continuous Monitoring System (CMS) Plan</del>
<del>Rule 1118—Control of Emissions from Refinery Flares—Flare Minimization Plan</del>
<del>Rule 1173—Control of Volatile Organic Compound Leaks and Releases from Components at Petroleum Facilities and Chemical Plants (h)(2)</del>
<del>Rule 1176—VOC Emissions from Wastewater Systems (d)(2)</del>
<del>Rule 1158—Storage, Handling, and Transport of Coke, Coal and Sulfur—Open Pile Control Plan</del>
<del>Rule 1132—Further Control of VOC Emissions from High Emitting Spray Booth Facilities</del>
<del>Rule 410—Odor Monitoring Plan</del>
<del>Rule 1420.1—Compliance Plan</del>
<del>Rule 1420.1—Continuous Furnace Pressure Monitoring Plan</del>
<del>Rule 1420.1—Compliance Plan for Closure Activities</del>

(i) Payment of Fees

(1) Plan Filing or Submittal Fee

In addition to payment of the filing fee, the initial payment for plan evaluation fees shall be ~~\$475.67~~as shown in the table below in this subparagraph and paid at the time of filing. ~~This fee shall not apply to plans pursuant to Rule 403—Fugitive Dust, Rule 461(i), and Rule 1166—Various Location Plans issued pursuant to the Decontamination of VOC Soil, for which the initial payment for plan evaluation fees will be in the table below in this section~~~~\$135.91.~~—This fee shall also not apply to Rule 1133 registration and annual updates, Rule 444—Open Burning, or Rule 1415—Reduction of Refrigerant Emissions from Stationary Refrigerant for which the plan submittal fee will be charged solely in accordance with subdivision (e) of this rule.—The adjustment to plan evaluation fees will be determined

at the time a plan is approved or rejected and notification of the amount due or refund will be ~~made~~provided to the applicant.

<u>A – Rule 403, 461 and 1166 Plans</u>	<u>Non-Title V</u>	<u>Title V</u>
<u>FY 2017 -18</u>	<u>\$144.88</u>	<u>\$161.60</u>
<u>FY 2018-19 and thereafter</u>	<u>\$150.68</u>	<u>\$187.46</u>
<u>B – Rule 444, 1133 and 1415 Plans</u>	<u>See Rule 306 (c)</u>	<u>See Rule 306 (c)</u>
<u>C – All Other Plans</u>	<u>Non-Title V</u>	<u>Title V</u>
<u>FY 2017 -18</u>	<u>\$507.06</u>	<u>\$565.57</u>
<u>FY 2018-19 and thereafter</u>	<u>\$527.34</u>	<u>\$656.06</u>

(2) Independent Consultant Fees

In the case that the Executive Officer requires a qualified independent consultant, engaged by the District under a contract, to review the plan, the fees charged by the consultant will be in addition to all other fees required.

(3) Payment Due Date

Payment of all applicable fees, including annual review/renewal fee, shall be due in sixty (60) days from the date of personal service or mailing of the notification of the amount due. Non-payment of the fee within this time period will result in expiration of the plan. For the purpose of this paragraph, the fee payment will be considered to be received by the District if it is postmarked by the United States Postal Service on or before the expiration date stated on the billing notice. If the expiration date falls on a Saturday, Sunday, or a state holiday, the fee payment may be postmarked on the business day following the Saturday, Sunday, or the state holiday with the same effect as if it had been postmarked on the expiration date. No further plan applications will be accepted until such time as all overdue fees have been fully paid.

(4) Fee Due Date Exception

Whenever the Executive Officer has reasonable cause to believe that the plan evaluation fee will be less than the fee for one hour's work, the fee need not be paid at the time of filing and notification of amount due, if any, shall be sent at the time the plan is approved or rejected.

(5) Expedited Processing

Fees for expedited processing of plan evaluation will be an additional fifty percent (50%) of the applicable plan evaluation fee, and shall be submitted at the time that the expedited processing is requested.

(j) Small Business Discount

For small businesses filing plans, the fees assessed shall be fifty percent (50%) of the amounts specified in subdivisions (c), (d), (f), and (g).

(k) Alternative Recordkeeping System Plan Discount

For alternative recordkeeping system plan filed pursuant to Rule 109.1, the fee assessed shall be fifty percent (50%) of the amount specified in subdivisions (d), (f), and (g).

(l) Plan Application Cancellation Fee

The plan application cancellation fee shall be ~~\$181.16~~ as shown in the table below in this subdivision. The cancellation fee shall not apply when the application was filed based on an erroneous District request.

<u>Facility Type</u>	<u>Non-Title V</u>	<u>Title V</u>
<u>FY 2017 -18</u>	<u>\$193.12</u>	<u>\$215.40</u>
<u>FY 2018-19 and thereafter</u>	<u>\$200.85</u>	<u>\$249.86</u>

(m) Protocol/Report Evaluation Fees

Fees for the evaluation of source test protocols and reports consist of a~~A~~ minimum fee, plus an additional fee for time spent on the evaluation in excess of 5 hours of ~~\$357.19 will be charged for the evaluation of source test protocols and reports. Additional fees for time spent in the evaluation in excess of 5 hours will be assessed at the an hourly rate of \$135.91 per hour as follows:~~

<u>A – Minimum Fee</u>	<u>Non-Title V</u>	<u>Title V</u>
<u>FY 2017 -18</u>	<u>\$380.76</u>	<u>\$424.70</u>
<u>FY 2018-19 and thereafter</u>	<u>\$395.99</u>	<u>\$492.65</u>
<u>B – Hourly Rate for Additional Fee</u>	<u>Non-Title V</u>	<u>Non-Title V</u>
<u>FY 2017 -18</u>	<u>\$144.88</u>	<u>\$161.60</u>
<u>FY 2018-19 and thereafter</u>	<u>\$150.68</u>	<u>\$187.46</u>

**Proposed Amended Rule 306 (Cont.)** (~~Updated July 1, 2016~~**Amended June 2, 2017**)

(n) Exemptions

Mobile Source Emission Reduction Credit (MSERC) Applications, Compliance Plans required under Regulation XVI and Rule 2449 – Control of Oxides of Nitrogen from Off-Road Diesel Vehicles and Technical Infeasibility Certification Requests as cited in District Fleet Rules under Regulation XI shall be exempt from the provisions of this rule. Fees for Regulation XVI MSERC Applications and Compliance Plans shall be assessed in accordance with District Rule 309.

(o) Government Agencies

Federal, state, or local government agencies or public districts shall pay all fees.

(p) Air Quality Investment Program (AQIP)

Effective July 1, 1996, all Air Quality Investment Program (AQIP) fees shall be subject to Rule 311 and all other Rule 2202 registration fees shall be subject to Rule 308.

(q) Optional Expedited Protocol/Report Evaluation Processing Fee

Fees for requested expedited processing of Protocol/Report Evaluations, will be an additional fee based upon actual review and work time billed at a rate for staff overtime which is equal to one half of staff's hourly rate plus mileage~~the staff's hourly rate of \$135.91 plus \$70.50 per hour (one half of hourly rate plus mileage)~~. The established “minimum fee” found in Rule 306(m) shall be paid at the time of filing with the additional overtime fee billed following project completion (adjustments to the final bill will be made accordingly for the processing time which is included in the minimum fee). Fees are due at the time specified in the bill which will allow a reasonable time for payment. Request for expedited Protocol/Report Evaluation work can only be made upon initial work submittal, and approval of such a request is contingent upon the ability of the District to implement the necessary policies and procedures and the availability of qualified staff for overtime work.

<u>Hourly Rate in Addition to Rule 301 (m) Fee</u>	<u>Non-Title V</u>	<u>Title V</u>
<u>FY 2017 -18</u>	<u>\$220.03</u>	<u>\$228.83</u>
<u>FY 2018-19 and thereafter</u>	<u>\$245.42</u>	<u>\$284.69</u>

(r) Regulation XXVII Fees

(1) Fees for Rule 2701 – SoCal Climate Solutions Exchange

- (A) Entities submitting a plan will be assessed a filing fee of ~~\$128.11~~131.31.
  - (B) The fee for review and verification of Certified Greenhouse Gas Emission Reductions by SCAQMD staff shall be assessed at ~~\$132.59~~135.90 per hour or a prorated portion thereof.
- (2) Fees for Rule 2702 – Greenhouse Gas Reduction Program
  - (A) Upon submitting a completed Greenhouse Gas Reduction Program Request to the Executive Officer for certified emission reductions an entity shall pay a fee of ~~\$128.11~~131.31.
  - (B) Individuals or households wishing to participate are exempt from the plan fees for reductions used to offset personal, household or event GHG emissions.

## **ATTACHMENT G6**

(Adopted May 10, 1996)(Amended May 14, 1999)(Amended May 19, 2000)  
(Amended May 11, 2001)(Amended May 3, 2002) (Amended June 6, 2003)  
(Amended July 9, 2004)(Amended June 3, 2005)(Amended June 9, 2006)  
(Amended May 4, 2007)(Amended May 2, 2008)(Amended June 5, 2009)  
(Amended May 7, 2010)(Updated July 1, 2011)(Updated July 1, 2012)  
(Updated July 1, 2013)(Amended June 6, 2014)(Amended May 1, 2015)  
(Updated July 1, 2016)(Amended October 7, 2016)(Amended June 2, 2017)

**Effective July 1, 2017**

### **PROPOSED AMENDED RULE 307.1     ALTERNATIVE FEES FOR AIR TOXICS EMISSIONS INVENTORY**

(a)     Purpose

California Health and Safety Code Section 44300 et seq. provides authority for the District to adopt a fee schedule to recover the cost of implementing and administering the Air Toxics “Hot Spots” Information and Assessment Act of 1987. The District will annually collect from the owner/operator of each facility meeting the criteria set forth in paragraph (b)(1), (b)(2), and (b)(3), and each owner/operator shall pay, fees which shall provide for the following:

- (1)     Recovery of anticipated costs to be incurred by the California Air Resources Board (CARB) and Office of Environmental Health Hazard Assessment (OEHHA) to implement and administer the Act, and any costs incurred by OEHHA or its independent contractor for review of facility risk assessments submitted to the State after March 31, 1995 under Health and Safety Code Section 44361(c).
- (2)     Recovery of anticipated costs to be incurred by the District to implement and administer the Act, including but not limited to the cost incurred to review emission inventory plans, emission inventory data, air toxics inventory reports, risk assessments, to verify plans and data, and to administer this rule, Rule 1402 – Control of Toxic Air Contaminants from Existing Sources, and the Air Toxics “Hot Spots” program.

(b)     Applicability

Except for facilities exempted by Health and Safety Code Sections 44324, 44344.4(a), or 44380.1, this rule applies to any facility that operates in any portion of the fiscal year for which the fee is assessed and which:

- (1) Manufactures, formulates, uses, or releases any of the substances listed by the State Board pursuant to Health and Safety Code Section 44321 and contained in Appendix A of the Guidelines Report, or any other substance which reacts to form a substance so listed, and releases ten (10) tons per year or greater of any criteria pollutant;
- (2) Manufactures, formulates, uses or releases any listed substance or any other substance which reacts to form any listed substance, and which releases less than ten (10) tons per year of any criteria pollutant and falls in any class listed in Appendix E of the Guidelines Report;
- (3) Is reinstated under Health and Safety Code Section 44344.7; or
- (4) Is subject to Rule 1402.

(c) Definitions

For the purpose of this rule, the following definitions shall apply:

- (1) COMPLEX FACILITY means a facility that has more than five (5) processes as determined by six-digit Source Classification Codes (SCC).
- (2) CRITERIA POLLUTANT means total organic gases, particulate matter, nitrogen oxides, or sulfur oxides.
- (3) DIESEL ENGINE means an internal combustion engine with operating characteristics similar to the theoretical diesel combustion cycle. The regulation of power by controlling fuel supply in lieu of a throttle is indicative of a diesel (or compression ignition) engine.
- (4) DIESEL ENGINE FACILITY means any facility which has a diesel engine and is not subject to any other Rule 307.1 fees.
- (5) DIESEL-FUELED as defined in Rule 1470 – Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines (Rule 1470).
- (6) Diesel Particulate Matter (PM) as Defined In Rule 1470.
- (7) DISTRICT means South Coast Air Quality Management District.
- (8) DISTRICT TRACKING FACILITY means a facility:
  - (A) That has been prioritized by the District in accordance with Health and Safety Code Section 44360(a) using procedures that have undergone public review and that are consistent with the procedures presented in the most current version of the SCAQMD “Facility Prioritization Procedures For AB 2588 Program”, which is incorporated by reference herein;

- (B) That is required by the District to submit a quadrennial emissions inventory update pursuant to Health and Safety Code Section 44344 during the applicable fiscal year; and
  - (C) Whose prioritization scores for cancer and non-cancer health effects are both greater than 1.0 and equal to or less than 10.0.
- (9) FACILITY has the same meaning as defined in Section 44304 of the Health and Safety Code.
- (10) FACILITY PROGRAM CATEGORY means a grouping of facilities, meeting the definitions in subparagraphs (c)(1), (c)(4), (c)(8), (c)(12), (c)(13), (c)(14), (c)(18), (c)(19), (c)(20), (c)(21), (c)(22), (c)(27), (c)(30), or (c)(31) of this rule.
- (11) GUIDELINES REPORT (Air Toxics Hot Spots Emission Inventory Criteria and Guidelines Report) is the report incorporated by reference under Section 93300.5 of this title that contains regulatory requirements for the Air Toxics Hot Spots Emission Inventory Program.
- (12) HRA TRACKING FACILITY means a facility that has been prioritized by the District in accordance with Health and Safety Code Section 44360(a) using procedures that have undergone public review and that are consistent with the procedures presented in the most current version of the SCAQMD “Facility Prioritization Procedures For AB 2588 Program”, which is incorporated by reference herein, and the greater of the facility’s prioritization scores for cancer and non-cancer health effects is greater than 10.0, and meets either one of the following criteria:
  - (A) The facility has had its health risk assessment approved by the District in accordance with Health and Safety Code Section 44362 and the risk assessment results show a total potential cancer risk, summed across all pathways of exposure and all compounds, of equal to or greater than 1.0 and less than ten (10) cases per million persons and a total hazard index for each toxicological endpoint, both acute and chronic, of less than or equal to 1.0; or
  - (B) The facility has had its health risk assessment approved by the District in accordance with Health and Safety Code Section 44362 and the risk assessment results show a total hazard index for each toxicological endpoint, either acute or chronic, of greater than or equal to 0.1, but less than or equal to 1.0, and a total potential cancer



risk, summed across all pathways of exposure and all compounds, of less than ten (10) cases per million persons.

- (13) INDUSTRY-WIDE FACILITY means a facility that qualifies to be included in an industry-wide emission inventory prepared by the District pursuant to Health and Safety Code Section 44232, or an individual facility which emits less than ten (10) tons per year of each criteria pollutant, falls within a class composed of primarily small businesses, and whose emissions inventory report was prepared by the District.
- (14) MEDIUM FACILITY means a facility that has three (3) to five (5) processes as determined by six-digit SCCs.
- (15) NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS) CODE is the standard used to classify business establishments developed under the auspices of the United States Office of Management and Budget, which is herein incorporated by reference.
- (16) OEHHHA means the Office of Environmental Health Hazard Assessment, California Environmental Protection Agency.
- (17) OPERATOR means the person who owns or operates a facility or part of a facility.
- (18) PRIORITIZATION SCORE GREATER THAN TEN (10.0) FACILITY means a facility that does not have an approved health risk assessment and has been prioritized by the District in accordance with Health and Safety Code Section 44360(a) using procedures that have undergone public review and that are consistent with the procedures presented in the most current version of the SCAQMD "Facility Prioritization Procedures For AB 2588 Program", which is incorporated by reference herein, and the greater of the facility's prioritization scores for cancer and non-cancer effects is greater than 10.0.
- (19) RISK OF 10.0 TO LESS THAN 50.0 PER MILLION FACILITY means a facility that has had its health risk assessment approved by the District in accordance with Health and Safety Code Section 44362 and whose risk assessment results meet either of the following criteria:
  - (A) A total potential cancer risk, summed across all pathways of exposure and all compounds, of greater than or equal to 10.0, but less than 50.0 cases per million persons; or
  - (B) A total hazard index for each toxicological endpoint, either acute or chronic, of greater than 1.0 and a total potential cancer risk, summed

across all pathways of exposure and all compounds, of less than 50.0.

- (20) **RISK OF 50.0 TO LESS THAN 100.0 PER MILLION FACILITY** means a facility that has had its health risk assessment approved by the District in accordance with Health and Safety Code Section 44362 and whose risk assessment results show a total potential cancer risk, summed across all pathways of exposure and all compounds, of greater than or equal to 50.0, but less than 100.0 cases per million persons.
- (21) **RISK OF 100.0 PER MILLION OR GREATER FACILITY** means a facility that has had its health risk assessment approved by the District in accordance with Health and Safety Code Section 44362 and whose risk assessment results show a total potential cancer risk, summed across all pathways of exposure and all compounds, of greater than or equal to 100.0 cases per million persons.
- (22) **SIMPLE FACILITY** means a facility that has one (1) or two (2) processes as determined by six-digit SCC.
- (23) **SMALL BUSINESS** for the purpose of this rule, means a facility which is independently owned and operated and has met all of the following criteria in the preceding year:
  - (A) The facility has ten (10) or fewer (annual full-time equivalence) employees;
  - (B) The facility's total annual gross receipts are less than \$1,000,000; and
  - (C) The total annual gross receipts of the facility's California operations are less than \$5,000,000.
- (24) **SOURCE CLASSIFICATION CODES (SCC)** means number codes created by the United States Environmental Protection Agency used to identify processes associated with point sources that contribute emissions to the atmosphere.
- (25) **SPECIAL RISK ASSESSMENT FEE** means the fee charged to facilities to cover the cost of the qualified District personnel or a qualified consultant, as determined by the Executive Officer (EO), engaged by the District under contract, in the event that the EO determines that an existing health risk assessment should be revised and the owner/operator cannot perform this task without errors or delays.

- (26) STATE COSTS means the reasonable anticipated cost which will be incurred by the CARB and OEHHA to implement and administer the Act, as shown in the District staff report.
- (27) STATE INDUSTRY-WIDE FACILITY means a facility that (1) qualifies to be included in an industry-wide emission inventory prepared by the District pursuant to Health and Safety Code Section 44323, (2) releases, or has the potential to release, less than ten tons per year of each criteria pollutant, and (3) is either of the following:
  - (A) A facility in one of the following four classes of facilities: autobody shops, as described by NAICS Codes 441110 or 811121; gasoline stations, as described by NAICS Codes 447110 and 447190; dry cleaners, as described by NAICS Code 812320; and printing and publishing, as described by NAICS Codes 323111 through 323117 or 511110 through 511199; or
  - (B) A facility that has not prepared an Individual Plan and Report in accordance with sections 44340, 44341, and 44344 of the Health and Safety Code and for which the District submits documentation for approval by the Executive Officer of the CARB, verifying that the facility meets the requirements of Health and Safety Code Section 44323(a)-(d).
- (28) SUPPLEMENTAL FEE means the fee charged, pursuant to Section 44380.5 of the Health and Safety Code, to cover the costs of the District to review a health risk assessment containing supplemental information which was prepared in accordance with the provisions of Section 44360(b)(3) of the Health and Safety Code.
- (29) TOTAL ORGANIC GASES (TOG) means all gases containing carbon, except carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate.
- (30) UNPRIORITIZED FACILITY means a facility that has not been prioritized by the District in accordance with Health and Safety Code Section 44360(a) using procedures that have undergone public review and that are consistent with the procedures presented in the most current version of the SCAQMD “Facility Prioritization Procedures For AB 2588 Program”, which is incorporated by reference herein.

- (31) VOLUNTARY RISK REDUCTION FACILITY means a facility that elected to participate in the Voluntary Risk Reduction Program pursuant to Rule 1402.

(d) Fees

All sources subject to this rule shall be assessed an annual fee pursuant to Table I of this rule.

(1) Calculation of Fees

- (A) The District will establish the fee applicable to each facility for the recovery of State and District costs. The District will use State costs and District costs to calculate fees, and will take into account and allow for the unanticipated closing of businesses, nonpayment of fees, and other circumstances which would result in a shortfall in anticipated revenue; and
- (B) The District will calculate fees on the basis of the Facility Program Category as set forth by July 1 of the applicable fiscal year, except for facilities excluded under subparagraph (d)(7) of this rule.

(2) Flat Fees

- (A) A facility in the State Industry-Wide Facility Program Category, as defined in this rule, shall be assessed the fee specified in Table I.
- (B) A facility in the District Tracking Program Category, as defined in this rule, will be assessed the annual fee specified in Table I to cover the cost to the District to review the facility's quadrennial emission inventory update.
- (C) A facility in the Diesel Engine Facility Program Category, as defined in this rule, shall be assessed the annual Flat Fee specified in Table I.
- (D) The maximum fee that a small business as defined in this rule shall pay is ~~\$368.02~~377.22.
- (E) The supplemental fee as defined in this rule, which may be assessed upon the operator of a facility, shall be no higher than ~~\$2,931.23~~3,004.51.

(3) Special Risk Assessment Fees

When a facility's health risk assessment was prepared or revised by District personnel or a contractor engaged by the District, the owner/operator of the facility for which a health risk assessment is performed shall pay the fees

equal to the total actual and reasonable time incurred by District, including actual contractor costs and District staff time, assessed at the hourly rate of ~~\$128.11~~ \$131.31 per person per hour or prorated portion thereof. When the health risk assessment is conducted or is evaluated and verified by a consultant engaged by the District or District personnel, the fees charged will be in addition to all other fees required.

(4) Voluntary Risk Reduction Facility Fees

A Voluntary Risk Reduction Facility, as defined in this rule, shall be assessed the fee specified in Table I until approval of the Final Implementation Report under Rule 1402 paragraph (j)(2). Once the Final Implementation Report is approved by the Executive Officer, the Voluntary Risk Reduction Fee shall be assessed the HRA Tracking Facility Program Category specified in Table I.

(5) Public Notifications and Meetings

When public notification is required pursuant to Rule 1402 subdivision (q), the facility owner/operator shall either directly pay or reimburse the District for costs of Public Meetings, including venue rental, audio visual rental equipment and personnel, mailing, translation services, parking, security, and equipment rental.

(6) Fee Payment and Collection; Effect of Failure to Pay

(A) The District will notify and assess the operator of each facility subject to this rule in writing of the fee due. The operator shall remit the fee to the District within sixty (60) days after the receipt of the fee assessment notice or the fee will be considered past due. For the purpose of this rule, the fee payment will be considered received by the District if it is postmarked by the United States Postal Service on or before the due date stated on the billing notice. If the due date falls on a Saturday, Sunday, or a state holiday, the fee payment may be postmarked on the next business day following the Saturday, Sunday, or state holiday with the same effect as if it had been postmarked on the due date.

(B) If an operator fails to pay the fee within sixty (60) days of this notice pursuant to subparagraph (d)(6)(A) of this rule, the District may assess a surcharge of not more than one hundred percent (100%) of the assessed fee, but in an amount sufficient, in the District's determination, to pay the District's additional expenses incurred by

the operator's non-compliance. If an operator fails to pay the fee within 120 days after receipt of this notice, the District may initiate permit revocation proceedings. If any permit is revoked it shall be reinstated only upon full payment of the overdue fees plus any surcharge as specified in this subparagraph.

(7) Payment to the State

The District will collect the fees assessed by or required to be assessed by this rule. After deducting the costs to the District to implement and administer the program, the District will transmit to the State Board the amount the District is required to collect for recovery of state costs as specified in Table I.

(8) Exemptions

A facility shall be exempt from paying fees if, by July 1 of the applicable Fiscal Year, any one or more of the following criteria are met:

- (A) The facility has been prioritized by the District in accordance with Health and Safety Code Section 44360(a) using procedures that have undergone public review, and the facility's prioritization score is less than or equal to 1.0 for both cancer and non-cancer health effects. The procedure for estimating priority of facilities were developed based on the most current approved version of SCAQMD "Facility Prioritization Procedures For AB 2588 Program", which is incorporated by reference herein.
- (B) The facility had its health risk assessment approved by the District in accordance with Health and Safety Code Section 44362 and the risk assessment results show a total potential cancer risk, summed across all pathways of exposure and all compounds, of less than one case per one million persons and a total hazard index for each toxicological endpoint, both acute and chronic, of less than 0.1. Some appropriate procedures for determining potential cancer risk and total hazard index are presented in the most current approved version of the OEHHA "Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments" and SCAQMD "Supplemental Guidelines for Preparation of Health Risk Assessments for the Air Toxics "Hot Spots" Information and Assessment Act", which are incorporated by reference herein.

- (C) The facility primarily performs printing as described by NAICS Codes 323111 through 323117 or 511110 through 511199, and the facility uses an annualized average of two (2) gallons per day or less [or seventeen (17) pounds per day or less] of all graphic arts materials (deducting the amount of any water or acetone) unless the District required a health risk assessment and results show the facility would not qualify under subparagraph (d)(8)(A) of this rule.
- (D) The facility is a wastewater treatment plant as described by NACIS Code 221320, the facility does not have a sludge incinerator and the maximum throughput at the facility does not exceed 10,000,000 gallons per day of effluent unless the District required a health risk assessment and results show the facility would not qualify under subparagraph (d)(8)(A) of this rule.
- (E) The facility is a crematorium for humans, animals, or pets as described by NAICS Codes 812210, 812220, or any NAICS Code that describes a facility using an incinerator to burn biomedical waste (animal), the facility uses propane or natural gas as fuel, and the facility annually cremates no more than 300 cases (human) or 43,200 pounds (human or animal) unless the District required a health risk assessment and results show the facility would not qualify under subparagraph (d)(8)(A) of this rule. Facilities using incinerators that burn biomedical waste other than cremating animals do not qualify for this exemption.
- (F) The facility is primarily a boat building and repair facility or primarily a ship building and repair facility as described by NAICS Codes 336611, 336622, 488390 or 811490, and the facility uses twenty (20) gallons per year or less of coatings or is a coating operation using hand held non-refillable aerosol cans only unless the District required a health risk assessment and results show the facility would not qualify under subparagraph (d)(8)(A) of this rule.
- (G) The facility is a hospital or veterinary clinic building that is in compliance with the control requirements specified in the Ethylene Oxide Control Measure for Sterilizes and Aerators, section 93108 of this title and has an annual usage of ethylene oxide of less than 100 pounds per year if it is housed in a single story building, or has an annual usage of ethylene oxide of less than 600 pounds per year if it

is housed in a multi-story building unless the District required a health risk assessment and results show the facility would not qualify under subparagraph (d)(8)(A) of this rule.

- (H) The facility was not required to conduct a risk assessment under Health and Safety Code Section 44360(b), and the District, or the facility with the concurrence of the District, has conducted a worst-case, health conservative risk assessment using screening air dispersion modeling criteria set forth in Appendix F of the Guidelines Report and has demonstrated to the satisfaction of the District that the facility's screening risk levels meet the criteria set forth in subparagraph (d)(8)(A) of this rule.



**TABLE I**  
**FACILITY FEES BY PROGRAM CATEGORY**

FACILITY PROGRAM CATEGORY	COMPLEXITY	DISTRICT FEE	STATE FEE	TOTAL FACILITY FEE
<i>HRA Tracking*</i>	Simple Facility	<del>\$416.25</del> <u>426.66</u>	\$67	<del>\$483.25</del> <u>493.66</u>
	Medium Facility	<del>\$601.30</del> <u>616.33</u>	\$100	<del>\$701.30</del> <u>716.33</u>
	Complex Facility	<del>\$786.35</del> <u>806.01</u>	\$134	<del>\$920.35</del> <u>940.01</u>
<i>Unprioritized</i>	Simple Facility	<del>\$618.63</del> <u>634.10</u>	\$402	<del>\$1,020.63</del> <u>1,036.10</u>
	Medium Facility	<del>\$3,390.07</del> <u>3,474.82</u>	\$603	<del>\$3,993.07</del> <u>4,077.82</u>
	Complex Facility	<del>\$4,504.91</del> <u>4,617.53</u>	\$804	<del>\$5,308.91</del> <u>5,421.53</u>
<i>PS&gt;10, No HRA</i>	Simple Facility	<del>\$5,249.21</del> <u>5,380.44</u>	\$1,674	<del>\$6,923.21</del> <u>7,054.44</u>
	Medium Facility	<del>\$5,622.20</del> <u>5,762.76</u>	\$2,009	<del>\$7,631.20</del> <u>7,771.76</u>
	Complex Facility	<del>\$5,992.31</del> <u>6,142.12</u>	\$2,344	<del>\$8,336.31</del> <u>8,486.12</u>
<i>Risk ≥10 &lt;50 in a million or HI&gt;1</i>	Simple Facility	<del>\$6,365.28</del> <u>6,524.41</u>	\$3,014	<del>\$9,379.28</del> <u>9,538.41</u>
	Medium Facility	<del>\$6,736.81</del> <u>6,905.23</u>	\$3,349	<del>\$10,085.81</del> <u>10,254.23</u>
	Complex Facility	<del>\$7,108.38</del> <u>7,286.09</u>	\$3,684	<del>\$10,792.38</del> <u>10,970.09</u>
<i>Risk ≥50 &lt;100 in a million</i>	Simple Facility	<del>\$7,481.36</del> <u>7,668.39</u>	\$4,353	<del>\$11,834.36</del> <u>12,021.39</u>
	Medium Facility	<del>\$7,851.45</del> <u>8,047.74</u>	\$4,688	<del>\$12,539.45</del> <u>12,735.74</u>
	Complex Facility	<del>\$8,224.42</del> <u>8,430.03</u>	\$5,023	<del>\$13,247.42</del> <u>13,453.03</u>
<i>Risk ≥100 in a million</i>	Simple Facility	<del>\$8,597.44</del> <u>8,812.38</u>	\$5,693	<del>\$14,290.44</del> <u>14,505.38</u>
	Medium Facility	<del>\$8,967.53</del> <u>9,191.72</u>	\$6,028	<del>\$14,995.53</del> <u>15,219.72</u>
	Complex Facility	<del>\$9,344.19</del> <u>9,577.79</u>	\$6,363	<del>\$15,707.19</del> <u>15,940.79</u>
<i>Voluntary Risk Reduction</i>	Simple Facility	<del>\$5,249.21</del> <u>5,380.44</u>	\$1,674	<del>\$6,923.21</del> <u>7,054.44</u>
	Medium Facility	<del>\$5,622.20</del> <u>5,762.76</u>	\$2,009	<del>\$7,631.20</del> <u>7,771.76</u>
	Complex Facility	<del>\$5,992.31</del> <u>6,142.12</u>	\$2,344	<del>\$8,336.31</del> <u>8,486.12</u>
<i>District Tracking**</i>		<del>\$230.11</del> <u>235.86</u>		<del>\$230.11</del> <u>235.86</u>
<i>State Industry-wide</i>		<del>\$167.57</del> <u>171.76</u>	\$35	<del>\$202.57</del> <u>206.76</u>
<i>Diesel Engine Facility</i>	-	<del>\$125.47</del> <u>128.61</u>	-	<del>\$125.47</del> <u>128.61</u>

\*HRA Tracking --- (PS>10 with HRA) Risk $\geq$ 1, <10 in a million, or HI $\geq$ 0.1,  $\leq$ 1

\*\*District Tracking --- Priority Score greater than 1, and equal to or less than 10

HRA --- Health Risk Assessment

HI --- Hazard Index, Acute or Chronic

## ATTACHMENT G7

(Adopted November 3, 1989)(Amended June 6, 1992)(Amended June 11, 1993)  
(Amended June 10, 1994)(Amended May 12, 1995)(Amended May 10, 1996)  
(Amended May 9, 1997)(Amended May 8, 1998)(Amended May 14, 1999)  
(Amended May 19, 2000)(Amended May 11, 2001)(Amended May 3, 2002)  
(Amended June 6, 2003)(July 9, 2004)(Amended June 3, 2005)(Amended June 9, 2006)  
(Amended May 4, 2007)(Amended May 2, 2008)(Amended June 5, 2009)  
(Amended May 7, 2010)(Amended May 6, 2011)(Updated July 1, 2012)  
(Updated July 1, 2013)(Amended June 6, 2014)(Amended May 1, 2015)  
(Updated July 1, 2016)(Amended June 2, 2017)

~~Changes to the fees are effective July 1, 2016~~Effective July 1, 2017

### **PROPOSED AMENDED RULE 308.      ON-ROAD MOTOR VEHICLE MITIGATION OPTIONS FEES**

(a)      Applicability

Provisions of this rule shall apply to fees assessed for worksite registrations and filings pursuant to Rule 2202 On-Road Motor Vehicle Mitigation Options. Fees shall be paid for the submission or resubmission of Annual Registrations, Employee Commute Reduction Programs (ECRP), Annual Programs, strategy amendments, extension requests, Average Vehicle Ridership (AVR)/Creditable Commute Vehicle Reduction (CCVR) Certification, Software Certification, emission reduction project review, and transfer of emission reduction credits.

(b)      Definitions

- (1)      AMENDMENTS are changes to Rule 2202 registrations, and/or ECRP strategies which materially affect the implementation of the program or the addition or deletion of a worksite to a multi-site program.
- (2)      ANNUAL PROGRAM is a program submitted to the District that contains AVR results and a plan to achieve the performance requirements for the worksite.
- (3)      EVALUATION is the District's evaluation of a program resulting in approval or disapproval of that program.
- (4)      PROGRAM is any data and/or report required by Rule 2202 On-Road Motor Vehicle Mitigation Options to be submitted to the District.
- (5)      RESUBMITTAL is any revised program or revised Annual Program submitted to the District to correct a disapproved program.
- (6)      SUBMITTAL is any program provided to the District in accordance with Rule 2202 On-Road Motor Vehicle Mitigation Options.

(c) Program Fees

(1) Rule 2202 Registration Fees

All persons submitting a Rule 2202 registration to implement any compliance option in the rule, except for an ECRP or an AQIP, shall pay annually, the following fees at the time of registration.

(A) Single Site Registrations

Single site programs are subject to a ~~\$555.34~~569.22 per worksite annual registration fee.

(B) Multiple Site Registrations

Multiple site programs are subject to a fifteen percent (15%) discount of the fee established in subparagraph (c)(1)(A) per worksite annual registration fee.

(C) Resubmittals and Amendments

Resubmitted and amended registrations shall be subject to fifty percent (50%) of the fee established in subparagraph (c)(1)(A) and (c)(1)(B).

(2) Employee Commute Reduction Program (ECRP) Fees

All persons electing to submit an ECRP shall pay the following fees at the time of submittal. The Annual Program and ECRP Offset fees will become effective on June 7, 2004.

(A) Single Site Submittals

<u>Per Worksite</u>	<u>Annual Program</u>	<u>ECRP Offset</u>
500 or more employees	<del>\$1,057.40</del> <u>1,083.84</u>	<del>\$683.59</del> <u>700.68</u>
250 to 499 employees	<del>\$790.73</del> <u>810.50</u>	<del>\$512.67</del> <u>525.49</u>

(B) Multisite Program Submittals

Triennial program fees for multiple site program submittals are subject to a fifteen percent (15%) discount of the fee established in subparagraph (c)(2)(A).

(C) Resubmittals and Amendments

The single site resubmittal and amendment fee, excluding program strategy amendments fee shall be fifty percent (50%) of the single site submittal fee established in subparagraph (c)(2)(A). The

multisite resubmittal fee shall be fifty percent (50%) of the multisite program submittal fee established in subparagraph (c)(2)(B).

(D) Electronic Media Submittals

Persons submitting an ECRP using District-certified electronic media shall pay the appropriate fee established in paragraphs (c)(2)(A) and (B), less \$105.49 per submittal.

(E) Sites achieving (AVR) Targets

Any employer who achieves their Average Vehicle Ridership (AVR) target and chooses to file, a High AVR No-Fault Inspection, pursuant to Rule 2202 ECRP guidelines, in lieu of an Annual Program, shall submit the fee established in subparagraph (c)(1)(A) and (c)(1)(B).

(F) Program Strategy Amendments

A person submitting an amendment to program strategies consisting of the deletion or the replacement of any existing program strategies shall pay a fee of ~~\$166.65~~\$170.82 for each submittal per worksite. This fee shall not apply when the amendment consists solely of additional or enhanced strategies to the program or when the strategy amendment is submitted at the same time as part of the Annual Program submittal. Furthermore, any employer adding or deleting a worksite to a multi-site or geographic program shall pay a fee of ~~\$166.65~~\$170.82 per worksite being added or deleted, unless the worksite being deleted is no longer subject to Rule 2202.

(G) AVR/CCVR Certification Fees

Any person requesting District certification of AVR/CCVR verification methods; (including but not limited to random sampling, record-keeping or restructuring of the AVR survey form) pursuant to Rule 2202 ECRP guidelines, shall pay a fee of ~~\$427.11~~\$437.79. No additional fee will be due after a first disapproval and resubmittal. A second fee of ~~\$427.11~~\$437.79 shall be paid with a second resubmittal after a second disapproval.

(3) Late Submittal and Resubmittal Fees

A fifty percent (50%) increase in the applicable registration, or ECRP fee established in subparagraph (c)(1), or subparagraphs (c)(2)(A), (c)(2)(B) or (c)(2)(C) shall be paid as a surcharge where an applicable fee is not received in full on or before the due date for the registration, or ECRP.

(d) Determination of Applicability of Late Fees

The fee payment will be considered to be received by the District if it is postmarked by the United States Postal Service on or before the registration/ECRP due date and received in full. If the registration/ECRP due date falls on a Saturday, Sunday, or a state holiday, the fee payment may be postmarked on the business day following the Saturday, Sunday, or the state holiday with the same effect as if it had been postmarked on the registration/ECRP due date. No further program applications for a particular worksite will be accepted or approved until such time as all overdue fees have been fully paid.

(e) Government Agencies

Federal, state, or local government agencies or public districts shall pay all fees.

(f) Software Certification Fees

The District may certify independent computer software capable of reproducing registration/ECRP forms, thereby allowing employers to file registration/ECRP using electronic media.

(1) Fees for certification will be assessed to cover the costs of processing the certification application and for the testing and validation of the software's reliability and ability to meet District's software specifications and program requirements.

(2) Fees shall be paid at the time that the software is submitted for certification as follows:

(A)	Initial Certification Fee	<del>\$854.53</del> <u>875.89</u>
(B)	Recertification Fee	<del>\$427.11</del> <u>437.79</u>

(g) The District will certify ECRP training programs pursuant to Rule 2202 ECRP guidelines. Fees for certification will be assessed to cover the costs of processing the certification application, reviewing the proposed curriculum, and assessing the training provider's qualifications.

(1) Fees shall be paid at the time that the qualifications and/or the curriculum is submitted for certification as follows:

	Provider Firm	Certification	Recertification
(A)	Instructor	<del>\$427.11</del> <u>437.79</u>	<del>\$213.34</del> <u>218.67</u>
(B)	Curriculum	<del>\$854.53</del> <u>875.89</u>	<del>\$427.11</del> <u>437.79</u>

- (2) Fee for the District's initial training program for new Employee Transportation Coordinators shall be ~~\$172.97~~177.29 per person.
  - (3) A fee in the amount of ~~\$105.49~~108.13 shall be assessed to cover the cost of staff time to process each replacement Employee Transportation Coordinator Certificate of training.
- (h) An employer who has declared bankruptcy, for the official business or governmental operations of its organization or company, through a judicial court filing and confirmation process, may request the Executive Officer to grant a temporary waiver from complying with the requirements of Rule 2202 and Rule 308. Upon demonstration of the filing and confirmation of bankruptcy, the Executive Officer will grant an exemption for the duration of bankruptcy, not to exceed two (2) years from the date of the waiver.
- (i) **Service Charge for Returned Check**  
Any person who submits a check to the District on insufficient funds or on instructions to stop payment on the check, absent an overcharge or other legal entitlement to withhold payment, shall be subject to a \$25.00 service charge.
- (j) **Extensions to Surrender MSERC's**  
Any person requesting an extension to surrender MSERC's to the District shall pay a fee of ~~\$84.34~~86.42 per worksite.
- (k) **Emission Reductions Project Review**  
Any person requesting the approval of a project resulting in emission reductions, pursuant to the provisions of Rule 2202(f)(~~56~~), shall be assessed an evaluation fee of ~~\$421.32~~431.85 at the time of submittal. This fee will become effective on June 7, 2004. Additional evaluation fees may be assessed in accordance with Rule 309(c)(3) if necessary.
- (l) **Transfer of Emission Reduction Credits**  
Any person requesting a transfer of emission reduction credits shall pay a fee of ~~\$83.52~~85.61 per transaction. Credit transactions shall be jointly registered with the District by the credit transferor and transferee. The transferee shall be assessed the transaction fee per transaction at the time the transaction is registered with the District, unless the transferee is surrendering credits to meet the registration requirements for the current compliance year.

(m) Failure to Notify Surcharge

Any employer who became subject to Rule 2202 (as defined in Rule 2202 (b) – Applicability) and failed to notify the District within 30 days when they became subject to the rule, shall pay a surcharge of \$~~1,226.72~~1257.39 for every worksite.

If the employer notifies the District more than 30 calendar days from the date when they became subject to Rule 2202, the surcharge shall be reduced by 30% of the applicable fee, as follows: \$~~858.71~~880.18 for every worksite.

(n) Rule 2202 Registration Time Extension

Any person requesting a time extension to submit a Rule 2202 registration shall refer to Rule 313.



## **ATTACHMENT G8**

(Adopted June 10, 1994)(Amended May 10, 1996)(Amended May 9, 1997)  
(Amended May 8, 1998)(Amended May 14, 1999)(Amended May 19, 2000)  
(Amended May 11, 2001)(Amended May 3, 2002)(Amended June 6, 2003)  
(Amended July 9, 2004)(Amended June 3, 2005)(Amended June 9, 2006)  
(Amended May 4, 2007)(Amended May 2, 2008)(Amended May 7, 2010)  
(Updated July 1, 2011)(Updated July 1, 2012)(Updated July 1, 2013)  
(Amended June 6, 2014)(Amended May 1, 2015)(Updated July 1, 2016)  
(Amended June 2, 2017)

~~Changes to the fees are effective July 1, 2016~~**Effective July 1, 2017**

### **PROPOSED AMENDED RULE 309.      FEES FOR REGULATION XVI AND REGULATION XXV**

(a)      Applicability

Provisions of this rule shall apply to fees assessed for plans required by Regulation XVI and Regulation XXV, and for the transfer and acquisition of Mobile Source Emission Reduction Credits (MSERCs) generated pursuant to Regulation XVI and Regulation XXV rules. Fees shall be paid for:

- (1)      Rule 1610 Scrapping Plans
- (2)      Regulation XVI and Regulation XXV Mobile Source Emission Reduction Credit (MSERC) Applications and Compliance Plans
- (3)      MSERC Transaction Registration

(b)      Definitions

For the purpose of this rule the following definitions shall apply:

- (1)      MSERC TRANSACTION is the trade or transfer of MSERC ownership between entities, or between MSERC accounts of the same entity. MSERCs shall be denominated in terms of one pound of MSERC pollutant.
- (2)      PLAN is any data and/or test report required by federal or state law, or District rules and regulations to be submitted to the District. Plans include, but are not limited to, the following: Rule 1610 Scrapping Plans, Regulation XVI and Regulation XXV MSERC Applications, and Regulation XVI and Regulation XXV Compliance Plans.
- (3)      SMALL BUSINESS is as defined in Rule 102.

(c) Fee Assessments

- (1) Rule 1610 Scrapping Plans shall be assessed a filing and evaluation fee of ~~\$1,689.49~~\$1,800.68 for FY 2017-18 and ~~\$1,872.71~~ for FY 2018-19 and ~~thereafter~~. The fee shall be paid at the time of plan submittal.
- (2) Regulation XVI and Regulation XXV Plans as defined in paragraph (b)(2), except Scrapping Plans, shall be assessed a filing fee of ~~\$128.44~~\$136.57 for FY 2017-18 and ~~\$142.03~~ for FY 2018-19 and ~~thereafter~~ and an evaluation fee of ~~\$427.44~~\$455.30 for FY 2017-18 and ~~\$473.51~~ for FY 2018-19 and ~~thereafter~~ at the time of submittal.
- (3) Additional evaluation fees for plans shall be assessed at the rate of ~~\$124.96~~\$133.21 for FY 2017-18 and ~~\$138.54~~ for FY 2018-19 and ~~thereafter~~ per person per hour if necessary. Evaluation fees shall also be assessed at this rate for any amendments to Plans and Applications.
- (4) For small businesses filing scrapping plans, MSERC applications, and compliance plans, the fees assessed shall be fifty percent (50%) of the amounts specified in paragraphs (c)(1), (c)(2), and (c)(3).
- (5) MSERC transactions shall be jointly registered with the District by the MSERC transferor and transferee. The transferee shall be assessed a Transaction Registration Fee of ~~\$83.52~~\$89.03 for FY 2017-18 and ~~\$92.59~~ for FY 2018-19 and ~~thereafter~~, per transaction at the time the transaction is registered with the District.

(d) Inspection Fee

The inspection fee for Rule 1610 Scrapping Plan verification shall be an amount equal to the total actual and reasonable time incurred by the District for inspection and verification of the plan, assessed at the hourly rate of ~~\$102.43~~\$109.19 for FY 2017-18 and ~~\$113.56~~ for FY 2018-19 and ~~thereafter~~ per inspection staff or prorated portion thereof. For inspections conducted outside of regular District working hours, the fee shall be assessed at a rate of 150% of the above hourly rate.

(e) Payment of Fees

- (1) Payment of all applicable fees, including annual review/renewal fee, shall be due in thirty (30) days from the date of personal service or mailing of the notification of the amount due. Non-payment of the fee within this time period will result in expiration of the plan. For the purpose of this paragraph, the fee payment will be considered to be received by the District

if it is postmarked by the United States Postal Service on or before the expiration date stated on the billing notice. If the expiration date falls on a Saturday, Sunday, or a state holiday, the fee payment may be postmarked on the business day following the Saturday, Sunday, or the state holiday with the same effect as if it had been postmarked on the expiration date. No further plan applications will be accepted until such time as all overdue fees have been fully paid.

- (2) Whenever the Executive Officer has reasonable cause to believe that the plan evaluation fee will be less than the fee for one hour's work, the fee need not be paid at the time of filing and notification of amount due, if any, shall be sent at the time the plan is approved or rejected.

(f) Refunds

- (1) If a plan or an application as defined in paragraph (b)(2) is canceled, plan filing and evaluation fees, less the plan cancellation fee, will be refunded:
  - (A) If it is determined that the plan was not required pursuant to District rules; or
  - (B) The plan evaluation procedure has not been initiated by District staff.
- (2) The plan cancellation fee will be ~~\$170.76~~\$182.03 for FY 2017-18 and \$189.31 for FY 2018-19 and thereafter.
- (3) Claims for refund of any fee required by this rule shall be submitted in writing within one (1) year after the fee was paid.
- (4) The cancellation fee shall not apply when the plan was filed based on an erroneous District request.

(g) Government Agencies

Federal, state, or local government agencies or public districts shall pay all fees.

## **ATTACHMENT G9**

(Adopted May 10, 1996)(Amended May 9, 1997)(Amended May 8, 1998)  
(Amended May 14, 1999)(Amended May 19, 2000)(Amended May 11, 2001)  
(Amended May 3, 2002)(Amended June 6, 2003)(Amended July 9, 2004)  
(Amended June 3, 2005) (Amended June 9, 2006)(Amended May 4, 2007)  
(Amended May 2, 2008)(Amended May 7, 2010)(Amended May 6, 2011)  
(Updated July 1, 2012)(Updated July 1, 2013)(Amended June 6, 2014)  
(Amended May 1, 2015)(Updated July 1, 2016)(Amended June 2, 2017)

~~Changes to the fees are effective July 1, 2016~~Effective July 1, 2017

### **PROPOSED AMENDED RULE 311.      AIR QUALITY INVESTMENT PROGRAM (AQIP) FEES**

(a)      Applicability

This rule shall apply to all employers who participate in the Air Quality Investment Program (AQIP) option provided under Rule 2202. The Air Quality Investment Fees established in this rule shall be adjusted periodically to reflect market conditions.

(b)      Registration Fees

Any employer registering with the District to participate in the AQIP shall pay annually a registration fee of ~~\$128.44~~\$131.31 per worksite.

(c)      AQIP Investment Fees

(1)      Annual Compliance Option

At the time of registration any employer electing to participate in the annual AQIP compliance option shall annually invest in the restricted District fund \$46.73 for each employee reporting to work in the peak window; or,

(2)      Triennial Compliance Option

At the time of registration any employer electing to participate in the triennial AQIP compliance option shall invest in the restricted District fund \$129.79 for each employee reporting to work in the peak window. Any increase in the number of employees in the window shall be accounted for during the second and third year registrations by investing \$46.73 per each additional employee for the remaining years in the triennial compliance option.

(d) Late fees

If the registration fee is not received by the established due date, the original amount of the registration fee shall be increased by fifty percent (50%).

## ATTACHMENT G10

(Adopted June 9, 2006)(Amended May 4, 2007)(Amended May 2, 2008)  
(Amended June 5, 2009)(Amended May 7, 2010)(Updated July 1, 2011)  
(Updated July 1, 2012)(Updated July 1, 2013)(Amended June 6, 2014)  
(Amended May 1, 2015)(Updated July 1, 2016)(Amended July 2, 2017)

~~Changes to the fees are effective July 1, 2016~~Effective July 1, 2017

### **PROPOSED AMENDED RULE 313.      AUTHORITY TO ADJUST FEES AND DUE DATES**

(a) Summary

This rule provides limited discretion to the Executive Officer to adjust fees or reinstate permits where there has been an administrative error by the District, to extend the due date for payment of certain fees for good cause, and to waive or refund fees under circumstances set forth in this rule. The Executive Officer may delegate all or some of the discretion granted under this rule to a Fee Review Committee comprised of the Chief Financial Officer, the Deputy Executive Officer for Engineering and ~~Compliance~~Permitting, the Public Advisor, and the District Counsel, or their designees. This rule does not provide the Executive Officer authority to alter the substantive requirements contained in SCAQMD rules and regulations.

(b) Process

Any owner/operator seeking relief under this Rule shall obtain the appropriate fee review request form(s) from the Office of Public Affairs. Upon completion, the form(s), along with any supporting background documentation, must be filed within the appropriate time limits set forth in this rule. Where the Executive Officer has delegated authority under this rule to the Fee Review Committee, an owner/operator seeking relief may request a personal meeting with the Fee Review Committee. The Fee Review Committee will meet on a monthly basis, as necessary, to consider requests under this rule.

(c) Decisions

The Executive Officer shall seek to make a decision on any request for relief under this Rule in writing within 90 days unless the applicant is notified that additional time is needed to investigate the circumstances underlying the request. Where the decision is made by the Fee Review Committee, the applicant may seek reconsideration from the Fee Review Committee within 30 days where there is

substantial new information available. All decisions of the Fee Review Committee are final, except that they may be reviewed by the Executive Officer in his sole discretion to ensure compliance with this Rule. Decisions of the Executive Officer are final.

(d) Reinstatement of Permits, Applications, Plans, Registrations, and Other District Approvals

- (1) The Executive Officer may reinstate a permit, application, registration, plan, or any other District issued approval upon finding of administrative error by District staff regarding the calculation, imposition, noticing, handling, invoicing, and/or collection of any fee set forth in this Regulation.
- (2) The Executive Officer may reinstate any permit, application, registration, plan, variance (issued by the hearing board), or any other District issued approval that was determined by the Executive Officer to have been inadvertently canceled by the District.

(e) Adjustment of Fees

- (1) The Executive Officer may, upon finding of administrative error by District staff regarding the calculation, imposition, noticing, handling, invoicing, and/or collection of any fee set forth in this Regulation, rescind, reduce, increase or modify such fee. In no case may the Executive Officer reduce the amount of the excess emission fee below that specified in Rule 306(f), unless otherwise ordered by the Hearing Board.
- (2) Any request for relief under paragraph (e)(1) must be received within 3 years of the administrative error or from the time the applicant should have reasonably known that the error was made, as determined by the Executive Officer.

(f) Time Extension of Payment Due Dates

- (1) Whenever this Regulation requires a fee to be paid by a certain date, the Executive Officer may, for good cause, grant an extension of time, not to exceed one hundred eighty days (180), within which the fee payment shall be made. The Executive Officer may require partial fee payments to be made on set dates during the extension period.
- (2) Where an extension of time is requested due to a financial hardship, such request must be accompanied by sufficient background documentation to allow the Executive Officer to determine the applicant's financial ability to

pay the fee. Examples of such documentation include not less than three (3) months of financial data, written statement from a certified accountant, or a written statement from a bank representative.

- (3) Any request for relief under paragraph (f)(1) must be received before the final due date of the fee.
- (4) Any person requesting a due date extension, or a change in the permanent due date, for any fee under Rule 308 shall pay a surcharge of ~~-\$84.31~~\$86.42 per worksite.
- (5) The provisions of this subdivision shall not apply to any fee incurred under Rules 307 or 307.1.

(g) **Specific Fee Waivers and Reductions**

- (1) On or after January 1, 1996, the Executive Officer shall, from the date the first application is received, waive annual operating permit renewal fees required under Rule 301(d) for the first two annual renewals of a new manufacturing facility that locates within the South Coast Air Basin and creates five hundred (500) or more new full-time jobs with total facility NO<sub>x</sub>, SO<sub>x</sub>, VOC, or PM<sub>10</sub> emissions per full-time employee equal to or less than one-half (1/2) of any emission per employee target ratio for the industry class for the Year 2010 stated in the Air Quality Management Plan. After the first two annual renewal fee waiver time periods, the owner/operator shall be liable for all applicable fees set forth in subdivision (d) of Rule 301.
- (2) The Executive Officer may, for good cause ~~may~~ waive the permit processing fee when there is an event declared to be a “state of emergency,” as defined in Rule 118, for any application filed to replace currently permitted equipment destroyed, or for the relocation of currently permitted equipment residing within a condemned building.
- (3) If it can be established to the satisfaction of the Executive Officer that a facility is operating pursuant to a license issued by the Department of Rehabilitation under the State of California’s Business Enterprise Program, the owner/operator, upon request, shall be granted an annual waiver of any fee under this Regulation in accordance with California Welfare & Institutions Code Section 19633. Such owner/operator is entitled to this waiver of fees so long as an annual request is made in writing and the applicant demonstrates that an agreement is maintained to operate the



facility under the supervision of the State of California Department of Rehabilitation.

- (4) A request for any waiver or fee reduction under paragraphs (g)(1) or (2) must be received before the final due date of the fee in question, and must be in the manner prescribed on forms provided under this rule. The Executive Officer may request any supporting documentation needed to evaluate the request.
- (5) Except for fee waivers granted under ~~sub~~paragraph (g)(3), if the owner/operator, at any time during the applicable fee waiver or reduction time period, does not operate the facility or equipment in a manner consistent with all applicable District rules, the Executive Officer may rescind the fee waiver or reduction.

(h) Refunds

- (1) If an application for a permit to construct is canceled, permit processing fees, less the application cancellation fee, will be refunded if the permit evaluation has not been initiated by the District. The application cancellation fee will be ~~\$203.93~~\$209.03, or the permit fee set forth in the Summary Permit Fee Rates tables in Rule 301, whichever is less.
- (2) Any fee paid to the District pursuant to process a permit application, equipment registration, or plan shall be refunded upon finding by the Executive Officer that the District erroneously requested filing of the application, registration, or plan. The cancellation fee required in ~~sub~~paragraph (h)(1) shall not apply when the application for a permit to construct was filed based on an erroneous District request.
- (3) If a facility or equipment is operated in violation of District Rules or Regulations during any portion of the time period for which the fee was assessed, there shall be no refund.
- (4) Applications filed for a Permit to Operate for equipment which has been operating without a required District permit will not receive a refund.

(i) Service Charge for Returned Checks.

Unless waived for good cause by the Executive Officer, any person who submits a check to the District on insufficient funds or on instructions to stop payment, absent an overcharge or other legal entitlement to withhold payment, shall be subject to a \$25.00 service charge.

## ATTACHMENT G11

(Adopted June 6, 2008)(Amended January 9, 2009)(Amended May 7, 2010)  
(Updated July 1, 2011)(Updated July 1, 2012)(Updated July 1, 2013)  
(Amended September 6, 2013)(Amended June 6, 2014)(Amended May 1, 2015)  
(Updated July 1, 2016)(Amended June 2, 2017)

~~Changes to the fees are effective July 1, 2016~~Effective July 1, 2017

### **PROPOSED AMENDED RULE 314. FEES FOR ARCHITECTURAL COATINGS**

(a) Purpose

The purpose of this rule is to recover the District's cost of implementing the architectural coatings program and programs related to architectural coatings, and the revenues shall only be used for such purposes. California Health and Safety Code Section 40522.5 provides authority for the District to adopt a fee schedule on areawide or indirect sources of emissions which are regulated, but for which permits are not issued by the District, to recover the costs of programs related to these sources.

(b) Applicability

This rule applies to architectural coatings manufacturers who distribute or sell their manufactured architectural coatings into or within the District for use in the District and are subject to Rule 1113 - Architectural Coatings. This rule also applies to private labelers and big box retailers who distribute or sell architectural coatings into or within the District for use in the District and are subject to Rule 1113 – Architectural Coatings. This includes products sold through big box retailers with distribution centers located within or outside the District. This rule does not apply to architectural coatings sold in this District for shipment and application outside of this District or to aerosol coating products.

(c) Definitions

For the purpose of this rule, the following definitions shall apply:

- (1) AEROSOL COATING PRODUCT means a pressurized coating product containing pigments, resins, and/or other coatings solids that dispenses product ingredients by means of a propellant, and is packaged in a disposable aerosol container for hand-held application, or for use in specialized equipment for ground marking and traffic marking applications.

- (2) ANNUAL QUANTITY AND EMISSIONS REPORT includes the quantity of each architectural coating distributed or sold into or within the District for use in the District during each calendar year, reported as gallons and their associated VOC content, as supplied, reported in grams per liter, for each product in all container sizes.
- (3) APPURTENANCES are accessories to a stationary structure, including, but not limited to: hand railings, cabinets, bathroom and kitchen fixtures, fences, rain-gutters and down-spouts, window screens, lamp-posts, heating and air conditioning equipment, other mechanical equipment, large fixed stationary tools, signs, motion picture and television production sets, and concrete forms.
- (4) ARCHITECTURAL COATINGS are any coatings applied to stationary structures or their appurtenances, or to fields or lawns.
- (5) ARCHITECTURAL COATINGS MANUFACTURER is any person, company, firm, or establishment who imports, blends, assembles, produces, packages, repackages, or re-labels an architectural coating, excluding retail outlets where labels or stickers may be affixed to containers or where colorant is added at the point of sales. For the purpose of this rule, a private labeler is an architectural coatings manufacturer.
- (6) AUTHORIZED REPRESENTATIVE is the person authorized by the Responsible Party to prepare and submit the Annual Quantity and Emissions Report on behalf of an architectural coatings manufacturer.
- (7) BIG BOX RETAILER is a physically large-chain retail outlet that is classified by the U.S. Department of Labor under Standard Industrial Classification code 5211: Lumber and Other Building Materials Dealers, and listed by the Executive Officer as such prior to end of each calendar year.
- (8) COATING is a material which is applied to a surface in order to beautify, protect, or provide a barrier to such surface.
- (9) CONCENTRATES are coatings supplied in a form that must be diluted with water or an exempt compound, prior to application, according to the architectural coatings manufacturer's application instructions in order to yield the desired coating properties.
- (10) EXEMPT COMPOUNDS are as defined in Rule 102 - Definition of Terms.
- (11) FORMULATION DATA is the actual product recipe which itemizes all the ingredients contained in a product including VOCs and the quantities

thereof used by the architectural coatings manufacturer to create the product. Material Safety Data Sheets (MSDS) are not considered formulation data.

- (12) GRAMS OF VOC PER LITER OF COATING, LESS WATER AND LESS EXEMPT COMPOUNDS, is the weight of VOC per combined volume of VOC and coating solids and can be calculated by the following equation:

$$\text{Grams of VOC per Liter of Coating, Less Water and Less Exempt Compounds} = \frac{W_s - W_w - W_{es}}{V_m - V_w - V_{es}}$$

Where:     $W_s$     = weight of volatile compounds in grams  
               $W_w$     = weight of water in grams  
               $W_{es}$     = weight of exempt compounds in grams  
               $V_m$     = volume of material in liters  
               $V_w$     = volume of water in liters  
               $V_{es}$     = volume of exempt compounds in liters

For coatings that contain reactive diluents, the Grams of VOC per Liter of Coating, Less Water and Less Exempt Compounds, shall be calculated by the following equation:

$$\text{Grams of VOC per Liter of Coating, Less Water and Less Exempt Compounds} = \frac{W_s - W_w - W_{es}}{V_m - V_w - V_{es}}$$

Where:     $W_s$     = weight of volatile compounds emitted during curing, in grams  
               $W_w$     = weight of water emitted during curing, in grams  
               $W_{es}$     = weight of exempt compounds emitted during curing, in grams  
               $V_m$     = volume of the material prior to reaction, in liters  
               $V_w$     = volume of water emitted during curing, in liters  
               $V_{es}$     = volume of exempt compounds emitted during curing, in liters

- (13) GRAMS OF VOC PER LITER OF MATERIAL is the weight of VOC per volume of material and can be calculated by the following equation:

$$\text{Grams of VOC per Liter of Material} = \frac{W_s - W_w - W_{es}}{V_m}$$

Where:     $W_s$     = weight of volatile compounds in grams  
              $W_w$     = weight of water in grams  
              $W_{es}$     = weight of exempt compounds in grams  
              $V_m$     = volume of the material in liters

- (14) MULTI-COMPONENT COATINGS are reactive coatings requiring the addition of a separate catalyst or hardener before application to form an acceptable dry film.
- (15) POST-CONSUMER COATINGS are finished coatings that would have been disposed of in a landfill, having completed their usefulness to a consumer, and does not include manufacturing wastes.
- (16) PRODUCT is an architectural coating which is identified by means of a unique product code and product name or product line (if applicable), as written on the container label and that is subject to one of the coating category VOC limits specified in Rule 1113 paragraphs (c)(1) or (c)(2) Table of Standards.
- (17) PRIVATE LABELER is the person, company, firm, or establishment (other than the toll manufacturer) identified on the label of an architectural coating product.
- (18) RECYCLED COATINGS are coatings manufactured by a certified recycled paint manufacturer and formulated such that 50 percent or more of the total weight consists of secondary and post-consumer coatings and 10 percent or more of the total weight consists of post-consumer coatings.
- (19) RESPONSIBLE PARTY for a corporation is a corporate officer. A responsible party for a partnership or sole proprietorship is the general partner or proprietor, respectively.
- (20) SECONDARY (REWORK) COATINGS are fragments of finished coatings or finished coatings from a manufacturing process that has converted resources into a commodity of real economic value, but does not include excess virgin resources of the manufacturing process.

- (21) STATIONARY STRUCTURES include but are not limited to, homes, office buildings, factories, mobile homes, pavements, curbs, roadways, racetracks, and bridges.
  - (22) TOLL MANUFACTURER is an architectural coatings manufacturer who produces coatings for a private labeler.
  - (23) VOLATILE ORGANIC COMPOUND (VOC) is as defined in Rule 1113 – Architectural Coatings.
- (d) Requirement to Obtain a Manufacturer Identification (ID) Number
- (1) An architectural coatings manufacturer subject to this rule at any time during the calendar year 2008 shall apply to the District for a manufacturer ID number on or before December 31, 2008. An architectural coatings manufacturer that becomes subject to this rule in any year subsequent to calendar year 2008 shall apply to the District for a manufacturer ID number on or before December 31 of that year.
  - (2) Change or Acquisition of an Architectural Coatings Manufacturer
    - (A) When there is a change or acquisition of an architectural coatings manufacturer with a District issued manufacturer ID number, the successor architectural coatings manufacturer shall apply for a manufacturer ID number on or before December 31 of the calendar year of the change or acquisition, unless the successor architectural coatings manufacturer already has a District issued manufacturer ID number. The successor architectural coatings manufacturer shall include the previous manufacturer ID number in their Annual Quantity and Emissions Report for the first year after the change or acquisition.
    - (B) Acquisition of an architectural coatings manufacturer shall not be considered a change in ownership for the purposes of this rule if the architectural coatings manufacturer who is acquired continues to file Annual Quantity and Emissions Reports and pay fees under its District issued ID number.
  - (3) Delegation or Change of Responsible Party and/or Authorized Representative

Application for a manufacturer ID number pursuant to (d)(1), as submitted by the Responsible Party for an architectural coatings manufacturer, shall designate the Authorized Representative. The designating Responsible

Party is responsible for and may act in lieu of the Authorized Representative. A change to either the designating Responsible Party or Authorized Representative shall be made in writing using the same application form.

(e) Requirement to Submit an Annual Quantity and Emissions Report

(1) For each calendar year (January 1 through December 31) beginning with 2008 and continuing with each subsequent calendar year, an architectural coatings manufacturer shall, in a format determined by the Executive Officer, submit to the District by April 1 of the following calendar year (the official reporting due date) an Annual Quantity and Emissions Report electronically submitted by the Authorized Representative certifying that all information submitted (including electronic submittal) is true and correct. Information included in the Annual Quantity and Emission Report that was obtained from a company not owned or controlled by the reporting architectural coatings manufacturer shall be certified as true and correct to the best knowledge of the Authorized Representative submitting the report. The Annual Quantity and Emissions Report shall include, but not be limited to, the following:

- (A) Architectural coatings manufacturer information including the manufacturer ID number issued by the District;
- (B) Each architectural coating brand name, product code and product name;
- (C) Whether the coatings are waterborne or solvent-based;
- (D) Whether the coatings are for interior, exterior, or dual use;
- (E) The applicable coating category listed in the Table of Standards in Rule 1113 – Architectural Coatings;
- (F) The grams of VOC per liter of coating, less water and less exempt compounds, and excluding any colorant added to the tint base for each product as follows:
  - (i) For coatings packaged in a single container, as supplied;
  - (ii) For multi-component coatings, after mixing the components, as recommended for use by the architectural coatings manufacturer;-
  - (iii) For concentrates, at the minimum dilution recommended for use by the architectural coatings manufacturer;-

- (G) The grams of VOC per liter of material for each product as follows:
    - (i) For coatings packaged in a single container, as supplied;
    - (ii) For multi-component coatings, after mixing the components, as recommended for use by the architectural coatings manufacturer;
    - (iii) For concentrates, at the minimum dilution recommended for use by the architectural coatings manufacturer.÷
  - (H) In addition to (e)(1)(F) and (G), for solvent-based coatings, grams of VOC per liter of material for each product including the maximum thinning as recommended by the architectural coatings manufacturer;
  - (I) Total annual quantity of each product distributed or sold into or within the District for use in the District, as supplied or for a concentrate, at the minimal dilution recommended for use by the architectural coatings manufacturer, and reported in gallons for all container sizes. The annual quantity of each product shall include products sold through big box retailers with distribution centers located within or outside the District. Architectural coatings manufacturers shall use the list of big box retailers maintained by the Executive Officer as of the end of the calendar year for purposes of reporting quantities of products distributed or sold in the District through big box retailers; and
  - (J) For any product with VOC content higher than the applicable limit in Rule 1113, an indication of whether the product has been sold under any of the following provisions of Rule 1113 – Architectural Coatings:
    - (i) Sell-through provisions
    - (ii) Averaging Compliance Option
    - (iii) Small container exemption
    - (iv) Low Solids
    - (v) Stains or Lacquers sold above 4,000 feet.
- (2) If the architectural coatings manufacturer had no distribution or sales for the prior calendar year, the Authorized Representative must either certify that fact in a letter, on company letterhead, or indicate that fact in the online reporting program. If an architectural coatings manufacturer does not intend to sell coatings into or within the District in future years, the



Authorized Representative should indicate that intention in writing, so as to be removed from future outreach efforts.

- (3) An architectural coatings manufacturer that acquires another architectural coatings manufacturer shall provide the information specified in subparagraph (e)(1)(A) through (e)(1)(J) for the acquired architectural coatings manufacturer for the entire calendar year.
- (4) By January 30, 2009, and every year thereafter, a big box retailer shall report to the District and the architectural coatings manufacturer of that product the total annual quantity of each coating product distributed through its distribution centers for sale or sold in the District for the previous calendar year (January 1 through December 31), as supplied, in a format determined by the Executive Officer. The big box retailer shall also include a list of the store, address, city and ZIP code where the products contained in the report were sold. Big box retailers shall use the list maintained by the Executive Officer as of the end of the calendar year of big box retailers for purposes of reporting to the appropriate architectural coatings manufacturer the quantities of products distributed or sold in the District. The report submitted to the District and to each architectural coatings manufacturer shall be electronically submitted by a corporate officer certifying that all information reported is true and correct. The report shall also be submitted to each architectural coatings manufacturer in an electronic spreadsheet format.

(f) Recordkeeping

Architectural Coatings Manufacturers shall:

- (1) Maintain a copy of the signed application form submitted to the District to obtain the manufacturers ID number, and the written response from the District issuing a manufacturer ID number. The copies shall be maintained for five (5) years beyond the date on each document, and made available upon request by the Executive Officer.
- (2) Maintain records to verify data used to prepare the Annual Quantity and Emissions Report from architectural coatings distributed or sold into or within the District for use in the District and compliance with applicable rules and regulations. The records shall be maintained for five (5) years and made available upon request by the Executive Officer. Such records shall include but not be limited to:

- (A) Product formulation records (including both grams of VOC per liter of coating and grams of VOC per liter of material):
    - (i) Laboratory reports [including percent weight of non-volatiles, water, and exempts (if applicable); density of the coating; and raw laboratory data] of test methods conducted as specified in paragraph (m) or
    - (ii) Product formulation data or physical properties analyses, as applicable, with a VOC calculation demonstration; and
  - (B) Production records including, if applicable, batch tickets with the date of manufacture, batch weight and volume; and
  - (C) Distribution records:
    - (i) Customer lists or store distribution lists or both (as applicable) and
    - (ii) Shipping manifests or bills of lading or both (as applicable); and
  - (D) Sales records consisting of point of sale receipts or invoices to distributors or both, as applicable.
- (g) Fees
- (1) Manufacturer ID Number Fee

An architectural coatings manufacturer applying for a manufacturer ID number with the District as specified in paragraphs (d)(1) and (d)(2) shall pay a non-refundable application fee of ~~\$192.36~~\$197.17 at the time of submitting the application.
  - (2) Annual Quantity and Emissions Fees
    - (A) An architectural coatings manufacturer shall pay fees at the rates specified below (for the Annual Quantity Fee in clause (i) below, the actual final fee based on the total number of gallons of paint shall be rounded to nearest whole cent), on or before April 1<sup>st</sup> (the official due date). Fees are based on the annual quantity and emissions of architectural coatings distributed or sold into or within the District for use in the District for the previous calendar year. The fee rate to be applied shall be the fee rate in effect for the year in which the sales and emissions are actually reported, and not the fee rate in effect for the year the sales actually occurred.

**Fee Rate**

- (i) Annual Quantity Fee: \$0.04~~1~~ per gallon of paint.
  - (ii) Annual Emission Fee:    \$~~274.86~~281.73 per ton of VOC emissions.
- (B) If an architectural coatings manufacturer submits the Annual Quantity and Emissions Report in such a manner that District staff has to manually enter the data into the District database, then the architectural coatings manufacturer shall pay at the time of submittal a non-refundable fee of \$~~315.08~~322.96 for the first two hours of District time. The architectural coatings manufacturer shall be assessed additional fees at the rate of \$~~157.55~~161.49 per hour for any additional time beyond the first two hours.
- (h) Request to Amend the Annual Quantity and Emissions Report and Refund Request of Emission Fees
  - (1) An architectural coatings manufacturer shall submit a written request (referred to as an “Amendment Request”) for any proposed revisions to previously submitted Annual Quantity and Emissions Reports. Amendment requests submitted after one (1) year from the official due date of the subject Annual Quantity and Emissions Report shall include a non-refundable standard evaluation fee of \$322.96. In addition, evaluation time beyond two hours shall be assessed at the rate of \$161.49 per hour not to exceed 10 hours. Amendment requests received within one year (1) from the official due date of a previously submitted Annual Quantity and Emissions Report shall not incur any such evaluation fees. The Amendment Request shall include all supporting documentation and revised applicable reports.
  - (2) An architectural coatings manufacturer shall submit a written request (referred to as a “Refund Request”) to correct the previously submitted Annual Quantity and Emissions Report and request a refund of overpaid fees. Refund Requests must be submitted within one (1) year from the official due date of the subject Annual Quantity and Emissions Report to be considered valid. The Refund Request shall include a revised Annual Quantity and Emissions Report and all applicable supporting documentation. If the Refund Request submitted results in a refund, then the architectural coatings manufacturer shall incur no evaluation fee. If the refund request results in no refund, then the architectural coatings

manufacturer shall pay the standard evaluation fee and the hourly evaluation fees, as appropriate, specified in paragraph (h)(1).

(i) Fee Payments and Late Surcharge

- (1) Fee payments are the responsibility of the architectural coatings manufacturer.
- (2) If both the fee payments and the Annual Quantity and Emissions Report for the previous calendar year are not received by May 30, they shall be considered late; and a surcharge for late payment shall be imposed for fees past due as set forth in paragraph (i)(3). Architectural coatings manufacturers subject to paragraph (d)(2) on or after July 1 of the reporting year shall have an additional 6 months, or any additional time approved by the Executive Officer, to submit the fee payments and the Annual Quantity and Emissions Report for the acquired architectural coatings manufacturer. For the purpose of this paragraph, the fee payments and the Annual Quantity and Emissions Report shall be considered to be timely received by the District if it is postmarked on or before May 30. If May 30 falls on a Saturday, Sunday, or a state holiday, the fee payments and Annual Quantity and Emissions Report may be postmarked on the next business day following the Saturday, Sunday, or the state holiday with the same effect as if they had been postmarked on May 30.
- (3) If fee payments for the Annual Quantity and Emissions Report (including any unreported quantity and emissions) are not received within the time prescribed by paragraph (i)(2), a late payment surcharge shall be assessed on the fees past due and added to the fee rate in subparagraph (g)(2)(A), according to the following schedule:

Less than 30 days	5% of past due amount
30 to 90 days	15% of past due amount
91 days to one year	25% of past due amount
More than one year	50% of past due amount

(4) Fee Payment Subject to Validation

Acceptance of a fee payment does not constitute validation of the emission data.

- (j)     Service Charge for Returned Checks  
Any person who submits a check to the District on insufficient funds or on instructions to stop payment, absent an overcharge or other legal entitlement to withhold payment, shall be subject to a \$25.00 service charge.
  
- (k)     Confidentiality of Information  
Subject to the provisions of the California Public Records Act (Govt. Code § 6250-6276.48) information submitted to the Executive Officer may be designated as confidential. The designation must be clearly indicated on the reporting form, identifying exactly which information is deemed confidential. District guidelines require a detailed and complete basis for such claim in the event of a public records request.
  
- (l)     Violation  
It shall be a violation of this rule for any architectural coatings manufacturer to distribute or sell their manufactured architectural coatings into or within the District for use in the District, without having a manufacturer ID number issued by the District, within the time specified in subdivision (d).
  
- (m)     Test Methods  
For the purpose of this rule, test methods are as specified in Rule 1113.
  
- (n)     Severability  
If any provision of this rule is held by judicial order to be invalid, ~~or invalid or~~ inapplicable to any person or circumstance, such order shall not affect the validity of the remainder of this rule, or the validity or applicability of such provision to other persons or circumstances. In the event any of the exceptions to this rule are held by judicial order to be invalid, the persons or circumstances covered by the exception shall instead be required to comply with the remainder of this rule.
  
- (o)     Distributor(s) List  
On or before January 31<sup>st</sup>, all architectural coatings manufacturers subject to this rule shall provide to the District a list of all U.S. distributors to whom they supply architectural coatings. The list shall be in a format determined by the Executive Officer and shall include the distributors name, address, contact person and phone number.

- (1) Once the initial list of all U.S. distributors has been submitted, the architectural coatings manufacturer shall provide any changes to that list for subsequent reporting years.
  - (2) If there are no changes to the list of all U.S. distributor(s), the architectural coatings manufacturer in subsequent reporting years shall report no changes.
- (p) Exemption
- (1) Fees pursuant to ~~sub~~paragraph (g)(2) shall not be assessed on coatings with 5 or less grams of VOC per liter of material provided the Annual Quantity and Emissions Report is received within the time prescribed by subparagraph (i)(2).
  - (2) Fees pursuant to ~~sub~~paragraph (g)(2) shall not be assessed on recycled coatings distributed or sold into or within the District by a certified recycled paint manufacturer provided the Annual Quantity and Emissions Report is received within the time prescribed by ~~sub~~paragraph (i)(2).
  - (3) Fees pursuant to ~~sub~~paragraph (g)(2) shall not be assessed on any architectural coatings manufacturer whose distribution or sale of coatings into or within the District for use in the District are less than 1,000 gallons and have potential annual VOC emissions of 0.5 tons or less in a calendar year, provided the Annual Quantity and Emissions Report is received within the time prescribed by ~~sub~~paragraph (i)(2).
  - (4) Architectural coatings offered for sale as a dry mix, containing no polymer, that are only mixed with water prior to use, including, but not limited to, stucco, clays, and plasters.

## ATTACHMENT G12

(Adopted May 7, 2010)(Amended May 6, 2011)(Updated July 1, 2011)  
(Updated July 1, 2012)(Updated July 1, 2013)(Amended June 6, 2014)  
(Amended May 1, 2015)(Updated July 1, 2016)(Amended June 2, 2017)

~~Changes to the fees are effective July 1, 2016~~Effective July 1, 2017

### **PROPOSED AMENDED RULE 315. FEES FOR TRAINING CLASSES AND LICENSE RENEWAL**

(a) Fees for Rule Training Classes

<u>SCAQMD</u> Training Class	Fee
Rules 403 & 403.1	No Cost
Rule 461 Daily Self-Inspection Class	<del>\$153.24</del> <u>157.04</u>
Rule 461 Annual Periodic Inspection Class	<del>\$167.68</del> <u>171.87</u>
Rule 461 Tester Orientation Class	<del>\$159.41</del> <u>163.40</u>
Rule(s) 463/1178	<del>\$77.49</del> <u>79.43</u>
Rule(s) 1110.2/1146/1146.1	No Cost
Rule 1176	<del>\$59.88</del> <u>61.38</u>
Rule 1403	<del>\$83.39</del> <u>85.47</u>
Rule 1469	<del>\$33.11</del> <u>33.94</u>

(b) Certified Permitting Professional (CPP) License Fees

- (1) The fee for the CPP exam administered by SCAQMD is ~~\$158.24~~162.20. This fee also covers the first year license fee for those who pass the exam.
- (2) The annual renewal fee for the CPP license fee is ~~\$158.24~~162.20. The license shall expire if the license renewal fee is not received by the District or postmarked within 30 days after the mailing of invoices or June 30<sup>th</sup>, whichever is later.

- (3) A CPP license that has expired due to nonpayment of the annual renewal fee may be reinstated by submitting a request for reinstatement and payment in full of the amount due at the time the license expired. A reinstatement surcharge shall also be paid equivalent to fifty percent (50%) of the amount due. Such request and payment shall be made within six (6) months of the license expiration. A license shall not be reinstatable after December 31<sup>st</sup> of the year it has expired.



# ATTACHMENT H

## SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

### **Final Staff Report**

### **Proposed Amended/Updated Regulation III – Fees**

#### **Including:**

Proposed Amended Rule 301 - Permitting and Associated Fees  
Proposed Amended Rule 303 - Hearing Board Fees (CPI Update Only)  
Proposed Amended Rule 304 - Equipment, Materials, and Ambient Air Analyses (CPI Update Only)  
Proposed Amended Rule 304.1 - Analyses Fees (CPI Update Only)  
Proposed Amended Rule 306 - Plan Fees  
Proposed Amended Rule 307.1 - Alternative Fees for Air Toxics Emissions Inventory (CPI Update Only)  
Proposed Amended Rule 308 - On-Road Motor Vehicle Mitigation Options Fees (CPI Update Only)  
Proposed Amended Rule 309 - Fees for Regulation XVI  
Proposed Amended Rule 311 - Air Quality Investment Program (AQIP) Fees (CPI Update Only)  
Proposed Amended Rule 313 - Authority to Adjust Fees and Due Dates (CPI Update Only)  
Proposed Amended Rule 314 - Architectural Coatings (CPI Update Only)  
Proposed Amended Rule 315 - Fees for Training Classes and License Renewal (CPI Update Only)

**June 2, 2017**

#### **Deputy Executive Officer**

#### **Planning, Rule Development and Area Sources**

Philip Fine, Ph.D.

#### **Assistant Deputy Executive Officer**

#### **Planning, Rule Development and Area Sources**

Susan Nakamura

#### **Planning and Rules Manager**

Carol Gomez

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**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
GOVERNING BOARD**

Chairman: DR. WILLIAM A. BURKE  
Speaker of the Assembly Appointee

Vice Chairman: BEN BENOIT  
Mayor Pro Tem, Wildomar  
Cities of Riverside County

**MEMBERS:**

MARION ASHLEY  
Supervisor, Fifth District  
County of Riverside

JOE BUSCAINO  
Councilmember, 15<sup>th</sup> District  
City of Los Angeles Representative

MICHAEL A. CACCIOTTI  
Mayor, South Pasadena  
Cities of Los Angeles County/Eastern Region

JOSEPH K. LYOU, Ph. D.  
Governor's Appointee

SHEILA KUEHL  
Supervisor, Third District  
County of Los Angeles

LARRY MCCALLON  
Mayor Pro Tem, Highland  
Cities of San Bernardino County

JUDITH MITCHELL  
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SHAWN NELSON  
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JANICE RUTHERFORD  
Supervisor, Second District  
County of San Bernardino

EXECUTIVE OFFICER:  
WAYNE NASTRI

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- C4 - Comparison of Expenditures by Revenue Categories

## **I. EXECUTIVE SUMMARY**

Regulation III – Fees primarily establishes the fee rates and schedules to recover SCAQMD's reasonable costs of regulating and providing services to permitted sources. The Permitted Source Program is primarily supported by three types of fees that provide over 62% of the SCAQMD budget, namely permit processing fees, annual renewal (equipment-based) fees, and annual renewal (emissions-based) fees, all of which are contained in Rule 301. In addition, the Permitted Source Program includes certain activities for which separate fees are charged, such as Source Testing and Hearing Board variances and permit appeals. Also included in the permit-related fee program are Rule 222 registration fees and plan fees, since these are similar to permits for the sources to which they apply. Regulation III-Fees also establishes fees and rates for other fee programs, unrelated to the Permitted Source Program, such as Transportation Programs fees and Area Source fees (architectural coatings).

In the 1990's the SCAQMD began experiencing significant shortfalls in its budget due to declining revenues that threatened the continuity of many of its programs and services. Shortfalls continue to exist despite the significant budget reductions adopted, increasing vacancy rates due to unfilled positions and continuous improvements in performance and efficiency. Moreover, the SCAQMD faces a number of challenges in the upcoming years: changes in federal grant funding levels, increased retirement costs due to actuarial and investment adjustments, and one-time penalties and settlement revenue that varies annually. Deficits have been covered through use of reserves which have been primarily funded with one-time penalty revenue.

To keep pace with inflation and better address the remaining shortfall in revenues, staff recommends that fees be increased based on a three-tiered approach. First, for FY 2017-18, staff recommends that most current Regulation III fees be adjusted by the 2.5% change in the California Consumer Price Index (CPI) for calendar year (CY) 2016 via the automatic action of Rule 320 - Automatic Adjustment Based on Consumer Price Index for Regulation III Fees. Per Rule 320, this fee increase is effective automatically unless the Board affirmatively votes not to adopt it. Since this first component fee increase will be insufficient to recover costs for services provided by approximately \$7 million, staff proposes the following two cost recovery components to better recover costs from the Permitted Source Program. Staff recommends that, in response to a 2016 U.S. EPA Title V Program Review finding that Title V program fees do not cover program costs, as required by the Clean Air Act (CAA), that Title V operating permit-related fees (permitting and annual renewals) be adjusted by a further 16% increase in each of the next two fiscal years (FY 2017-18 and FY 2018-19). Finally, in order to more fully recover the cost of programs and services within the non-Title V Permitted Source Program staff proposes, permit processing and annual renewal (equipment-based) fees (also called "annual operating fees") including plan fees, be adjusted by 4% beyond the 2.5% increase in the CPI in each of the next two fiscal years (FY 2017-18 and FY 2018-19). These fees are not subject to the 16% fee increase.

The adjustment of specific Title V permit-related fees and non-Title V permit-related fees above the 2.5% increase in the CPI is necessary in order to better recover the reasonable regulatory costs of issuing these permits and carrying out mandated services and programs such as enforcement related activities. The proposed increases are also equitable because these mandated regulatory programs and services directly benefit those receiving permits. These permit-related services include but are not limited to providing permits to construct/operate source equipment, preparing notices and responding to comments, conducting compliance audits and inspections, and verifying compliance of all applicable rules. Further, costs are allocated based on the relative burden placed on the permitted source programs or the benefit provided. Staff's proposal has been incorporated into the FY 2017-2018 Draft Budget and Work Program.

Staff is also proposing other administrative amendments with no fiscal impact. These amendments would update, delete, clarify or correct typographical errors in selected provisions of the regulation. These include specific references in Regulation III to other rules that have been subsequently amended, obsolete language which is being deleted, extending due dates for certain emissions fees and general re-formatting.

The proposed fee increases were formulated to address cost recovery by refining the alignment of program revenue with program costs that have typically never been fully recovered. Without the proposed fee amendments, staff currently projects an approximate \$7 million deficit in revenues in the FY 2017-18 proposed budget for programs related to issuing permits and enforcement for permitted sources. Factors impacting budget shortfalls include legally mandated funding for the San Bernardino County Employee Retirement Association (SBCERA) which is significantly increasing retirement costs (and which translates into certain overhead costs) decreasing emissions fees revenues, and revenues remaining generally flat from annual permit renewal fees. The proposed FY 2017-18 Draft Budget and Work Program, including supporting documentation, are hereby incorporated by reference in this report. These documents are available at <http://www.aqmd.gov/home/about/finance> and the SCAQMD Public Information Center.

## **II. PROPOSED AMENDMENTS**

For FY 2017-18, proposed amendments to Regulation III consist of the following four (4) components:

1. A fee increase for most fees by 2.5%, consistent with the change in the California Consumer Price Index (CPI) for 2016, and as mandated by District Rule 320 (see Appendix A);
2. An additional fee rate increase above the 2.5% increase in the CPI of 16% in each of the next two (2) FYs, in permit-related services (permit processing, annual renewals and plans, but excluding emissions based fees) for Title V facilities;
3. An additional fee rate increase above the 2.5% increase in the CPI of 4% in each of the next two (2) FYs, in permit-related services (permit processing,

annual renewals and plans, but excluding emissions based fees) for non-Title V facilities; and

4. Administrative amendments, with no fiscal impact, that delete, update, clarify or correct existing text in the regulation.

Staff proposes that emissions-related fees be increased by the 2.5% increase in the CPI only whether they are for Title V or non-Title V sources.

#### **A. COMPONENT 1 – CPI ADJUSTMENT**

For FY 2017-18, staff is recommending that most fees in Regulation III (excluding those specifically listed below as exempt) be allowed to adjust commensurate with the CY 2016 change in the CPI, pursuant to the automatic action of Rule 320 – Automatic Adjustment Based on Consumer Price Index for Regulation III – Fees. Pursuant to Rule 320(b) most fees as set forth in Regulation III “...shall be automatically adjusted by the change in the California Consumer Price Index for the preceding calendar year, as defined in H&SC §40500.1(a).” For the preceding calendar year (CY) 2016, the change in the CPI was equivalent to 2.5%. See Appendix B – Fee Rate Increases for Provisions in Regulation III for a list of specific fees in Regulation III that will be adjusted by the increase in the CPI only (column “1 CPI only”).

For the current proposal, the following fees in Regulation III are specifically excluded from any fee rate increase (i.e., Component 1, Component 2, and Component 3 fee increases):

- The returned check service fee in various rules (currently set by state law at \$25),
- Rule 301(w) – Enforcement Inspection Fees for Statewide Portable Equipment Registration Program (PERP) fees (these fees are set by the state),
- Rule 307.1 Table I – Facility Fees By Program Category; “State Fee” column figures only (these fees are set by the state), and
- Rule 311(c) Air Quality Investment Program Fees (these fees pay for programs to reduce emissions under Rule 2202 – On Road Vehicle Mitigation Options and do not support the SCAQMD Budget).

#### **B. COMPONENT 2 – TITLE V PERMIT PROCESSING AND ANNUAL RENEWAL FEE ADJUSTMENT**

In response to a U.S. EPA report<sup>1</sup>, in order to more fully recover the costs of the Title V program, Title V permit processing (equipment-based) and annual renewal

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<sup>1</sup> SCAQMD Title V Operating Permit Program Evaluation Final Report. USEPA. 9/30/2016. Finding that the SCAQMD Title V program is dependent on penalty monies and recommending that fees be increased to recover costs.

fees (also called “annual operating fees”), including plan fees in Regulation III would be increased by an additional 16% in each of the next two FYs. See Appendix B, column “3 CPI + TV”, for the list of rule provisions that will be adjusted by the increase in the CPI and a 16% increase in FY 2017-18 and again by 16% for FY 2018-19.

**C. COMPONENT 3 – NON-TITLE V PERMIT PROCESSING AND ANNUAL RENEWAL FEE ADJUSTMENT**

In order to better recover the costs of certain programs within the Permitted Source Program and better align program costs with revenues, permit processing (equipment-based) and annual renewal fees (also called “annual operating fees”), including plan fees for non-Title V sources in Regulation III would be increased by 4% beyond the increase in the CPI in each of the next two FYs. See Appendix B, column “2 CPI + Non-TV”, for the list of rule provisions that will be adjusted by the increase in the CPI and a 4% increase in FY 2017-18 and again by 4% for FY 2018-19.

**D. COMPONENT 4 – ADMINISTRATIVE AMENDMENTS (NO FISCAL IMPACT)**

The following proposed amendments to rules in Regulation III have no fee impact but would update, delete, clarify, or correct typographical errors in selected provisions of the regulation to:

- Update Rule 301 (a)(10), subdivision (j) heading and (j)(4) regarding Public Notification to align with prior amendments to Rule 212. This amendment updates references in Rule 301 to Rule 212 by removing the word “significant” from “significant project” in Rule 301 (a)(10), Subdivision (j) heading and (j)(4);
- Delete obsolete references in Rule 301 to the FY 2007-08 six-month transitional emissions fees;
- Clarify reference to the list of contaminants in Rule 301(e)(6) pertaining to clean fuels fee thresholds;
- Extend the due date for certain fees in Rule 301(e)(9), (10), (11) and (15) from sixty (60) to seventy-five (75) days;
- Delete obsolete Rule 301(l)(10)(E) reference to special operating fee for petroleum refineries for FY 2007-08 through FY 2008-09;
- Delete obsolete prior FY fees for initial and final Title V fees in Rule 301(m)(3)(A) and (B);
- Delete obsolete CPI rebate provision for FY 2010-11 in Rule 301(ab);
- Update the reference in Rule 301(v)(2) regarding fees for expedited CEQA work from 301(i) to 301(j);
- Correct a typographical error in Rule 301 Table IA for “Afterburner (< 1 MMBTU/hr, venting m.s.)” to “Afterburner ( $\leq$  1 MMBTU/hr venting m.s.)”;



- Reformat the table in Rule 306(h) listing the types of plans subject to an annual renewal/review fee;
- Clarify that the published Rule 306(q) fee for optional expedited plan processing includes an amount for mileage;
- Update Rule 308(k) Emission Reductions Project Review to delete a reference to a past date and to correct the reference to Rule 2202; and
- Re-commence publishing fees in Rule 314(g) to three (3) decimal places (with a proviso that the actual amount remitted is rounded to the nearest penny).

Other miscellaneous text corrections have no fiscal impact but do correct references in the rule. For example, Rule 301, subdivision (a), Applicability serves as a table of contents for locating other subdivisions in the rule. Over several rule amendment cycles, with the insertion or deletion of various provisions, the actual location of such text has changed but the reference in subdivision (a) has not been concurrently updated. Table 1 provides examples of some of the changes and the necessity to update references, which have no effect on fees, but correct erroneous references.

**Table 1 – Necessity for Administrative Updates to References in Rule 301**

Rule Provision Providing Current Reference	Current Rule Reference	Correct (Proposed Amended) Rule Reference	Current Referenced Subdivision Content
301(a)(1) – Facility Permits	301(m)	301(n)	Title V Facilities
301(a)(11) – Asbestos Demolition and Renovation Activities	301(n)	301(o)	Facility Permits
301(a)(12) – Lead Abatement Activities	301(o)	301(p)	Asbestos Fees

### III. IMPLEMENTATION

#### A. CALCULATING THE FEE INCREASE

The methodology for applying the 3 types of component fee increase, is as follows:

Component 1

A base (inflation-factor or cost of living) increase of 2.5% equivalent to the change in the CY 2016 California CPI to most FY 2016-17 fees in Regulation III, effective July 1 2017 (FY 2017-18).

Example: Rule 301(x) Rule 1149 and 1166 Notification Fees

Current FY 2016-17 Fee  $\times$  CPI Rate Increase =

FY 2017-18 Fee =

\$59.37  $\times$  1.025 =

\$60.85

Component 2

An additional fee rate increase above CPI of 16%, in each of the next two (2) FYs, in permit-related services for Title V facilities.

Example: Rule 301(m)(7) – Permit Revision Fee

For FY 2017-18:

Current FY 2016-17 Fee  $\times$  CPI Rate Increase  $\times$  16% Rate Increase =

FY 2017-18 Fee =

\$1,021.20  $\times$  1.025  $\times$  1.16 =

\$1,214.21 (rounded to the nearest cent)

For FY 2018-19 and thereafter:

FY 2017-18 Fee  $\times$  16% Rate Increase =

FY 2018-19 Fee =

\$1,214.21  $\times$  1.16 =

\$1,408.48<sup>2</sup>

Component 3

An additional fee rate increase above CPI of 4% in each of the next two (2) FYs, in permit-related services for non-Title V facilities.

Example: Rule 301(c)(1)(J) – Standard Streamline Permits

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<sup>2</sup> This fee will likely be slightly higher due to the action of Rule 320, which will automatically increase most FY 2018-19 fees in Regulation III by the change in the CY 2017 California CPI (unless the Board elects to forgo or modify the rate). The amount of this change is unknown until January 2018 and therefore, cannot be included in this fee calculation.

For FY 2017-18:

$$\begin{aligned} &\text{Current FY 2016-17 Fee} \times \text{CPI Rate Increase} \times 4\% \text{ Rate Increase} = \\ &\text{FY 2017-18 Fee} = \\ &\$811.45 \times 1.025 \times 1.04 = \\ &\underline{\$865.01 \text{ (rounded to the nearest cent)}} \end{aligned}$$

For FY 2018-19 and thereafter:

$$\begin{aligned} &\text{FY 2017-18} \times 4\% \text{ Rate Increase} = \\ &\text{FY 2018-19 Fee} = \\ &\$865.01 \times 1.04 = \\ &\underline{\$899.61}^3 \end{aligned}$$

## **B. APPLYING THE FEE INCREASE**

For the purposes of these proposed amendments, permit-related services include: permit processing (new permits, modification/alteration/change of existing permits, annual renewals and plans). It does not include emissions or emissions-related fees, which are to be increased by the CPI only.

Certain fees are designed to better recover the cost of the specialized service provided regardless of the facility type. The fees typically include an hourly rate component or other mechanism to account for more time consuming, larger or complex cases. These fees are only being increased by CPI. Examples include emissions-related fees in Rule 301 Table IIA – Special Processing Fees – Air Quality Analysis/Health Risk Assessment; Rule 301 Table IIC – CEMS, FSMS & ACEMS Fee Schedule (hourly rates for more time consuming projects); and Rule 307.1- Table 1 District Fee column (fees are categorized based on Simple, Medium and Complex facility designations). Other specialized services include CEQA, Transportation Programs and Area Source programs.

Most fees in Rule 301(l) RECLAIM facilities are increased by 4% in each of the next two FYs since these are permit-related services. Most fees in Rule 301(m) Title V are increased by 16% in each of the next two years since these are specifically Title V permit-related services. Some sources are required to pay both a RECLAIM and Title V fee because of the amount of resources required expended in permit-related services. For prior FYs, the RECLAIM and Title V fees were equivalent and a source that was subject to Title V and RECLAIM paid a fee equivalent to double the RECLAIM (or Title V) facility fee. For FY 2017-18, in addition to CPI, the RECLAIM non-Title V portion of the fees is being increased by 4% and the Title V portion of the fees is being increased by 16%. Therefore the

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<sup>3</sup> See footnote 2 above.

new proposed fee for a source that is subject to both Title V and RECLAIM is less than double the Title V RECLAIM source fee but greater than double the RECLAIM fee and is calculated as shown in the following example for Rule 301(l)(5):

Pursuant to Rule 301(l)(5) for FY 2016-17, the Facility Amendment Fee for a RECLAIM source is \$1,021.20. If the source is both a RECLAIM facility and a Title V facility the fee is currently doubled (i.e.,  $\$1,021.20 \times 2 = \$2,042.40$ ). However, for FY 2017-18 the fee has been computed as the new RECLAIM fee (based on CPI and a 4% rate increase) plus, the new Title V fee (based on CPI and a 16% rate increase). Table 2A shows an example of how the proposed \$2,302.81 FY 2017-18 fee is computed for a source subject to both Title V and RECLAIM.

**Table 2A – An Example of How to Compute the Cumulative Fee for a Source That Is Subject to Both RECLAIM and Title V in FY 2017-18**

Source Type	Current FY 2016-17 Fee	Fee Rate Increase for FY 2017-18	Proposed FY 2017-18 Fee
RECLAIM only source	\$1,021.20	2.5% and 4%	\$1,088.60
Title V only source	\$1,021.20	2.5% and 16%	\$1,214.21
Both RECLAIM and Title V source	\$2,042.40	2.5% and 4% plus 2.5% and 16%	\$2,302.81

Similarly, for the same scenario in Table 2A, the computation for the proposed subsequent FY (2018-19) fee of \$2,540.62 is shown in Table 2B.

**Table 2B – Computing the Cumulative FY 2018-19 and Thereafter<sup>4</sup> Fee for the Table 2A Example (Source Subject to Both RECLAIM and Title V)**

Source Type	FY 2017-18 Fee	Fee Rate Increase for FY 2018-19	Proposed FY 2018-19 Fee
RECLAIM only source	\$1,088.60	2.5% and 4%	\$1,132.14
Title V only source	\$1,214.21	2.5% and 16%	\$1,408.48
Both RECLAIM and Title V source	\$2,302.81	2.5% and 4% plus 2.5% and 16%	\$2,540.62

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<sup>4</sup> See footnote 2 above.

## IV. BACKGROUND

### A. LEGAL AUTHORITY

The California Health and Safety Code (H&SC) provides the SCAQMD with the authority to adopt various fees to recover the costs of its programs. The Permitted Source Program is primarily funded through Section 40510(b) which authorizes the SCAQMD to adopt “a fee schedule for the issuance of variances and permits to cover the reasonable cost of permitting, planning, enforcement, and monitoring related thereto.” Thus, virtually every cost related to regulating permitted sources may be recovered under this type of fee. Entities regulated through the Permitted Source Program must receive two types of permits. The SCAQMD issues permits to construct for each permitted facility or piece of equipment. In addition, the SCAQMD issues annual operating permits to operate for each facility or piece of equipment (RECLAIM and Title V facilities receive a facility permit; other sources receive equipment-based permits.) Correspondingly, the SCAQMD has adopted two basic types of permit fees: a fee for permits to construct, and a fee for permits to operate. The fee for permits to construct is based on the type of equipment involved, with higher fees for more complicated equipment. Each type of basic and control equipment is assigned a fee schedule, A through H, as set forth in Rule 301, Tables IA and IB.

The fee for permits to operate is further divided into two components: an equipment-based fee, and an emissions-based fee. The equipment-based fee is based on the same equipment categories as are used in the permit to construct fee, i.e., the categories A through H, but there are only four fee schedules for the equipment-based permit to operate fee. Each permit to construct fee schedule is assigned to one of the four permit to operate fee schedules, based on complexity of inspection and compliance activities and emissions potential.

The annual emissions-based operating fee includes a flat fee paid by each facility, and a tiered fee for sources emitting four or more tons per year of criteria pollutants (e.g., VOC, NO<sub>x</sub>, and PM) and smaller amounts for emissions of specified air toxics. State law authorizes the use of emissions-based fees. (H&SC Section 40510(c)(1)). RECLAIM and Title V facilities pay additional permit-related fees to recover the additional costs associated with these types of facilities.

The permit to construct fees and the annual operating equipment-based fees are proportional to the labor involved in permit processing and enforcement related activities. The emissions-based annual operating fee is used to cover indirect regulatory costs such as planning, rulemaking, outreach, and air monitoring, which are also necessary to regulate the permitted source. California courts have upheld the use of emissions-based fees to cover these types of costs, holding that such an allocation method is reasonably related to an air district’s costs of regulating a permit holder’s air pollution. *San Diego Gas & Electric Co. v. San Diego County APCD* (1988) 203 Cal. App. 3d 1132, 1148.

The SCAQMD has further subdivided certain permit-related activities and imposed fees to at least partially recover their costs, such as Source Testing, CEQA analysis, and newspaper noticing, rather than grouping these costs into the basic permit processing or operating fees. This enables the SCAQMD to more closely tie the costs of specific permit-related activities to the fees paid. While there are many sub-types of fees within the basic structure, such as special processing fees for CEQA analysis or health risk assessments, the three permit-related fees (permit processing, equipment based annual renewal and emissions based annual renewal) are the basic structure.

Plan fees and Rule 222 equipment registration fees are also proposed to be increased by 4% for the next two FYs as they operate in a similar manner to permit processing and annual renewal fees for the equipment and activities covered, and are included in the revenue categories “Permit Processing Fees” and “Annual Operating Permit Renewal Fees.”

As noted above, the code authorizes the imposition of fees for variances (H&SC Section 40510(b)). These are included in Rule 303. The code also authorizes the imposition of fees for the costs of programs related to indirect sources (such as Rule 2202 ridesharing program fees) and Area Wide sources (such as Rule 314 related to architectural coatings) to cover the costs of programs related to those sources. (H&SC Section 40522.5). It is not necessary to increase these types of fees this year, other than the automatic CPI based increase, to support their related programs.

If the SCAQMD proposes to increase the Permitted Source Program fees by more than the change in the CPI, the increase must be phased in over a period of at least two years. H&SC Section 40510.5(b). Also, if a fee increase greater than CPI is adopted, the SCAQMD Governing Board must make a finding, based on relevant information in the rulemaking record, that the increase is necessary and will result in an apportionment of fees that is equitable. This finding shall include an explanation of why the fee increase meets these requirements. (H&SC Sections 40510(a)(4) and 40510.5(a)). These findings will be included in the SCAQMD Governing Board Resolution presented for the Public Hearing on Regulation III.

Finally, the total amount of fees collected by the SCAQMD shall not be more than the total amount collected in the 1993-1994 fiscal year, except that this total may be adjusted by the change in the CPI from year to year (H&SC Section 40523). Also, this limitation does not apply to fees adopted pursuant to a new state or federal mandate imposed on and after January 1, 1994. (H&SC Section 40523). The SCAQMD has consistently complied with this limit. Total fees (other than mobile source fees which staff believes are not covered by this section) collected in 1993-1994 were \$64.9 million; adjusted by CPI since that time the cap would be \$101.0 million. Total projected fees (except mobile source fees) for FY 2017-18 are \$90.4 million, which remains below the CPI adjusted cap.

In addition to stationary source revenues, SCAQMD receives revenue from mobile sources. Mobile source revenues include the Clean Fuels Fee, Carl Moyer and Proposition 1B funds. These are special revenue funds outside of the General Fund

budget which pay for specific technology advancement or emission reduction projects approved by the SCAQMD Governing Board and are consistent with the specific limits on the use of those funds. Periodically, funds to reimburse SCAQMD for its administrative costs in carrying out these projects are transferred by SCAQMD Governing Board action into the General Fund SCAQMD budget.

A second type of mobile source revenue is provided by AB 2766 from the 1992 legislative session, which provides the SCAQMD with 30% of a four-dollar fee assessed on each motor vehicle registered in the SCAQMD. These funds must be used for the reduction of pollution from motor vehicles, and for related planning, monitoring, enforcement, and technical studies necessary for the implementation of the California Clean Air Act. H&SC Code §44223. Staff assigns specific mobile-source related programs to this revenue source, as well as a proportionate share of activities such as ambient air quality monitoring and regional modeling which are not specifically related to stationary or mobile sources individually. These fees are currently set at the statutory maximum. AB 2766 fees have not been increased in over 20 years. Thus, based on CPI, the real value of AB2766 fees has declined by about 59%. The remainder of the AB 2766 revenues is divided between a share that is subvented to cities and counties for mobile source emission reduction programs and a share that is used to fund mobile source emission reduction projects recommended by the Mobile Source Air Pollution Reduction Review Committee (MSRC) and approved by the SCAQMD Governing Board.

## **B. PROPOSITION 26 COMPLIANCE**

On November 2, 2010, the voters of California enacted Proposition 26, which was intended to limit certain types of fees adopted by state and local governments. Proposition 26 broadly defines a tax to mean any charge imposed by a local government that does not fall within seven enumerated exceptions for valid fees. If a charge does not fall within an enumerated fee exception, it is considered a tax, and must be adopted by vote of the people. The SCAQMD does not have authority under state law to adopt a tax, so it may only impose a charge that is a valid fee under Proposition 26. In October 2010, the SCAQMD adopted Rule 320, which provides for an automatic adjustment of all SCAQMD fees by the change in the CPI from the previous year. Proposition 26 does not apply to fees adopted before its effective date. *Brooktrails Township County. Servs. Dist. v. Bd. of Supervisors of Mendocino County*, 218 Cal. App. 4<sup>th</sup> 195, 206 (2013). Therefore, the CPI adjustment is not subject to Proposition 26. Regardless, by design the CPI increase recovers only the reasonable increase in SCAQMD's costs as a result of inflation and the manner in which those increased costs are allocated bears a fair and reasonable relationship to the burdens on the District's activities as established by the underlying fee schedule.

This year's proposed fee increases are valid fees under at least one of the Proposition 26 fee exceptions. Cal. Const., art. XIIC, §1, subd.(e), par. (3). This section allows local agencies to adopt "[a] charge imposed for the reasonable regulatory costs to a local government for issuing licenses and permits, performing



investigations, inspections, and audits, enforcing agricultural marketing orders, and the administrative enforcement and adjudication thereof.”

Proposition 26 provides that an agency must establish by a preponderance of the evidence that the fee fits within one of the fee exceptions. Cal. Const., art. XIII C, §1. For this reason, this staff report for this fee proposal contains a detailed explanation of the basis of the proposed fee increase to recover the SCAQMD’s reasonable regulatory costs for issuing permits and enforcement.

Finally, Proposition 26 requires that the local government prove by a preponderance of the evidence that the amount of the fee “[1] is no more than necessary to cover the reasonable costs of the governmental activity, and that [2] the manner in which those costs are allocated to a payor bear a fair or reasonable relationship to the payor’s burdens on, or benefits received from, the governmental activity.” Cal. Const. art. XIII C §1. In this report, staff has provided a detailed explanation of the Permitted Source Program and the method of allocating program costs to the permit processing and annual operating fee payors to satisfy this requirement.

### **C. SCAQMD FEES STRUCTURE**

To fund its mandated programs, the SCAQMD utilizes a system of evaluation or permit processing fees, annual operating fees (equipment-based), emissions-based operating fees, Hearing Board fees, penalties/settlements, other fees (such as subscription fees) and investments that generate approximately 72% of its revenues. The remaining 28% of its revenue is from federal grants, California Air Resources Board subvention, California Clean Air Act Motor Vehicle fees, administrative costs for incentive programs, and miscellaneous income. The SCAQMD currently receives the bulk of its funding (62%) from stationary and some area sources and also relies on mobile source revenues, state subventions and federal grants to support a majority of the remaining costs not covered by stationary and area source fees, in such program areas as air monitoring, regional modeling, emissions inventory, planning, rule making, and emergency response. Costs of programs that are not directly related to stationary or mobile sources such as regional air monitoring, are supported by both stationary and mobile source revenues, in rough proportion to contribution to air pollution in the region by sources.

SCAQMD Regulation III – Fees describes activities for which fees are required and sets rates and schedules for the amount of fees to be charged. Since the adoption of Rule 320 in 2010, Regulation III is typically automatically updated (not amended) each year in support of SCAQMD’s annual budget. California H&S Code §§ 40510, 40510.5, and 40523 authorize the SCAQMD to increase fees consistent with an annual increase in the California CPI and allow increasing individual fees by a greater amount if the SCAQMD Governing Board makes the required findings of necessity and equitable apportionment.

Over the past twenty years the SCAQMD has in all but seven years held its general fee increases to the change in the California Consumer Price Index (CPI) and made significant reductions in its workforce and budget to offset declining revenues from emission fees. Federal and state law require the SCAQMD to regulate emissions from stationary sources, which it does through the issuance of various facility and equipment permits, as well as Rule 222 equipment registrations and plans, which operate similarly to permits for the sources covered by them. State law authorizes the SCAQMD to establish fees for issuing these permits to cover “the reasonable cost of permitting, planning, enforcement, and monitoring related thereto.” (H&SC §40510(b)).

These regulatory activities constitute the SCAQMD’s Permitted Source Program. The SCAQMD has adopted three basic types of Program fees: permit processing fees, annual renewal operating fees (equipment-based), and emissions-based operating fees. Traditionally, the SCAQMD has endeavored to recover its costs of permit processing from permit processing fees, its costs of inspection and enforcement from annual renewal operating fees, and its indirect costs related to the overall Permitted Source Program regulatory activities such as a proportional share of planning, monitoring, rule development and outreach programs, from emissions-based operating fees. In recent years, some of these indirect costs have been recovered from annual operating fees rather than emissions-based fees, since emissions fees are a declining source of revenue, without a corresponding reduction in rulemaking efforts and activities. These emissions fees allocate costs primarily based on the amount of emissions discharged and the greater regulatory burden those emissions impose.

The current structure for Permit Processing fees derives ultimately from a study of actual time spent processing permits, conducted by KPMG Peat Marwick for the 1990 fee amendments. Permit processing fee schedules were subsequently developed and updated based on actual time spent processing various types of equipment as gathered by permit processing staff.<sup>5</sup> Annual renewal operating fees are based on four basic schedules [Rule 301 (d)(2)] which are based on the size and complexity of the equipment, which is proportional to the amount of work needed to inspect and enforce SCAQMD rules.

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<sup>5</sup> In November 1989, the consulting firm of Peat Marwick Main and Co. “...began a comprehensive study, in concert with SCAQMD staff to assess the status of District fee programs which are outlined in Regulation III.” The resulting “Recommendation Regarding Fee Assessment Study” report was presented to the SCAQMD Governing Board on March 28, 1990 (Agenda Item #10).

On August 11, 1994, the SCAQMD Governing Board authorized an independent study of the SCAQMD’s fee structure and authority. A panel composed of representatives from Chevron, LA County Sanitation District, Hughes Environmental Corporation, Orange County Transportation Authority and the SCAQMD recommended the firm of KPMG to perform the study. A final “Report on the Study of the AQMD’s Fee Structure and Authority” was presented to the SCAQMD Governing Board on March 10, 1995 (Agenda Item #11).

Both these documents are on file and available at the SCAQMD Library, 21865 East Copley Drive, Diamond Bar, CA 91765, (909-396-2600).

**D. SCAQMD PERMITTED SOURCE PROGRAM**

The SCAQMD's overall budget is supported by a number of revenue sources. Some are set by state law (e.g., AB 2766 motor vehicle fees) and others are established by CARB (e.g., portable equipment registration program (PERP) fees). State law generally authorizes the SCAQMD to establish fees to support programs related to permitted sources, area sources, and indirect sources. For FY 2017-18, estimated revenue from the permitted source fees will fall short of the estimated costs of the Permitted Source Program. Accordingly, for Title V facilities, staff proposes a 16% per year increase in each of the next two FYs for certain fees related to Title V permitted sources, in addition to the automatic CPI fee adjustment under Rule 320 to fully recover the costs of the Title V program. Since not all fees are being increased by more than the CPI, the overall percentage fee increase for a typical refinery would be in the 5% to 6% range.

Additionally, for non-Title V facilities, staff proposes a 4% fee increase for certain fees related to permitted sources, in addition to the automatic CPI fee adjustment under Rule 320, in FY 2017-18, to cover a portion of this shortfall. Staff also proposes adopting an additional 4% increase beyond CPI in FY 2018-19 to cover more of the expected shortfall next year.

The SCAQMD's regulatory program for permitted sources includes the following broad categories:

- processing permits to construct, modifications/alterations, change of condition, and permits to operate, including CEQA, health risk analysis, public notice, air quality modeling, etc.;
- enforcement/compliance activity related to permitted sources, including inspections, complaint investigations, legal actions and settlements, variances and abatement orders;
- small business assistance, source education, and customer service (fee review committee; questions related to fees; Public Records Act compliance);
- air quality planning and rule development for permitted sources, including CEQA for Planning and Rules, socioeconomic assessment; emissions inventory development and commenting on CARB and EPA permitted source programs;
- source testing and laboratory analysis; special source-related monitoring; CEMS (continuous emissions monitors) and other compliance-related equipment;
- a proportionate share of ambient air quality monitoring and other activities related to air pollution such as regional modeling; and
- a proportionate share of public outreach programs, interagency communications such as local government outreach; advisory committees, etc.

In addition, any government agency requires certain overhead programs such as personnel, payroll, risk management, financial services, general legal advice, and information management. Where this kind of work can be related to a specific program (e.g., developing computer systems for permit processing), these costs are allocated to the appropriate work program line. Otherwise, these costs are identified as “SCAQMD allocatable overhead” and allocated over all Work Program code lines, based on the percent of Full Time Equivalents (FTEs) assigned to that Work Program line compared to total agency FTEs excluding allocatable overhead. Accordingly, a proportionate share of the costs of general programs required to run the agency such as personnel, payroll, etc., which are allocated to overall program work programs, are supported by the Permitted Source Program. The total cost of the Permitted Source Program is derived by summing the costs allocated to permit processing fees [\$32.8 million], annual operating fees (equipment-based) [\$38.5 million], annual operating fees (emissions-based) [\$21.4 million], Source Testing [\$2.8 million] and Hearing Board [\$1.7 million], as shown in Appendix C 2. The sum of these costs is \$97.2 million. The above-described costs are considered reasonable based on the budgeted FTEs assigned for the next Fiscal Year to each Work Program code line item (see the FY 2017-2018 Draft Budget and Work Program-). The SCAQMD Governing Board may consider FY 2016-17 programs to be a reasonable proxy for FY 2017-18 programs based on its knowledge and experience, and the fact that the total of 825 FTEs is still well below the agency maximums of 1,167 FTEs in FY 1991-1992.<sup>6</sup>

The total revenues projected from these five fee categories prior to the proposed fee increases beyond the CPI adjustment is \$19.3 million, \$51.7 million, \$19.5 million, \$0.8 million and \$0.3 million; respectively. The total of these projected revenues is \$91.6 million. Therefore, the total costs of the Permitted Source Program are greater than total projected revenues by \$5.6 million. Of these revenue totals, \$6.4 million of permit processing overhead are offset by annual operating fees. Accordingly, it is necessary to increase the Permitted Source Program fees and/or supplement those fees with other revenue. For FY 2017-2018, staff proposes to increase permit processing fees and the annual operating fees for Title V 16% which would generate \$1.5 million in additional revenue. For non-Title V facilities those same fees would be increased by 4%, which would generate an additional \$2.1 million. The funds generated by this fee increase will enable the SCAQMD to recover more of its costs from the Permitted Source Program. Staff proposes to fund the remaining \$6.7 million shortfall in permit processing fees, with \$4.5 million of annual operating fees and \$2.2 million from the unrestricted “other” revenues to fully cover the costs of the permitted source related program (see Appendix C 2).

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<sup>6</sup> For additional details regarding revenues, expenditures, and the SCAQMD fee structure, see Sections VII and VIII of this report.

## **V. TITLE V FEE INCREASE COST ANALYSIS**

In September 2016, the EPA Region IX issued a report on the South Coast Air Quality Management District's Title V Operating Permit Program Evaluation. One finding from the Title V program evaluation was that the program revenues do not adequately cover program costs as required by CAA Section 503(b)(3)(i) and 40 C.F.R. part 70 requirements. The EPA recommended that the SCAQMD prepare a plan to take measures over time to minimize the continued use of penalties and reserves to cover Title V program deficits.<sup>7</sup>

A cost allocation analysis was performed on the Fiscal Year 2017-18 Proposed Budget for the Title V Program to determine the extent of the shortfall going into the next fiscal year. Below is the result of the cost recovery analysis which projects that the Title V program for Fiscal Year 2017-18 will have a shortfall of \$3,300,151 or 32%. The 32% fee increase was analyzed with respect to FY 2017-18 alone. However, state law requires any increase in fees above the change in the CPI to be phased in over two or more years. Therefore, for Title V permit-related fees, staff is proposing to apply a 16% fee increase in each of the next two FYs. While this is slightly higher than a 32% fee increase over two years, it is nonetheless reasonable and equitable. In particular, since the District must forgo the benefits derived from realizing the full 32% fee increase in a single year, the delay in implementing the full 32% increase means that the District will need to compensate for deficits in FY 2017-18 with other General Fund monies or may need to delay implementation of certain programs. In addition, the value of a dollar in FY 2017-18 will be higher than the value of a dollar in FY 2018-19 so that a slight increase in the actual rate above 32% is justified. Finally, the actual 2017-18 budget uses 16% in the actual revenue projections. The practice will be the same in FY 2018-19.

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<sup>7</sup> In addition, other recommendations in the EPA report added increased SCAQMD requirements for Title V program activities.

**Table 3 – FY 2017-18 Proposed Budget – Title V- Cost Allocation Summary**

Description	Annual Operating	Permit Processing	Total
<b><u>Direct Expenditures</u></b>			
Timely Review of Permits	\$ -	\$ 9,016,477	\$ 9,016,477
Ensure Compliance	3,086,907	-	3,086,907
Develop Rules	55,200	-	55,200
<b>Total Direct Expenditures</b>	<b>3,142,107</b>	<b>9,016,477</b>	<b>12,158,583</b>
<b><u>Additional Expenditures</u></b>			
Legal/Information Management	\$ 486,519	\$ -	\$ 486,519
Science Technology Advancement	1,104,669	-	1,104,669
<b>Total Additional Expenditures</b>	<b>\$ 1,591,189</b>	<b>\$ -</b>	<b>\$ 1,591,189</b>
<b>Total Expenditures</b>	<b>\$ 4,733,295</b>	<b>\$ 9,016,477</b>	<b>\$ 13,749,772</b>
<b><u>Revenues</u></b>			
FY 2017-18 Projection with 2.5% CPI	\$ 7,781,260	\$ 2,668,362	\$ 10,449,621
<b>Total Revenues</b>	<b>\$ 7,781,260</b>	<b>\$ 2,668,362</b>	<b>\$ 10,449,621</b>
Surplus/(Deficit)	\$ 3,047,964	\$ (6,348,115)	\$ (3,300,151)
<b>(1) Annual Op to Permit OH</b>	<b>\$ (1,883,145)</b>	<b>\$ 1,883,145</b>	<b>\$ -</b>
Adjusted Surplus/(Deficit)	\$ 1,164,819	\$ (4,464,970)	\$ (3,300,151)
Adjusted Fee Increase to Recover Costs			<b>32%</b>

Note: Table totals may be slightly off due to rounding errors.

The following discussion explains how the costs and revenues in Table 3 are derived:

#### **A. EXPENDITURES**

It was also noted in the EPA Region IX Title V program evaluation that “the SCAQMD has a clear accounting of its Title V program costs.” The following sections explain the basis for the expenditures reported in the FY 2017-18 Budget Request – Title V – Cost Allocation.

##### **1. Title V Direct Program Expenditures:**

Direct Title V expenditures were identified based on the Fiscal Year 2017-18 Proposed Budget Cost Allocation Schedule (CAS). The CAS identified eleven work programs that track expenditures directly related to Title V activities. The following chart reports that Fiscal Year 2017-18 Proposed Budget reflects total direct Title V expenditures of \$12,158,583.

**Table 4 – Title V Direct Program Expenditures**

WP Code	Program Category	Project Description	Description	Program Expenditures	Total Overhead Allocated	FY 17-18 Budget Request
50773	Develop Rules	Title V & NSR Rulemaking-Su	Title V Rules Dev/Amend/Impl	\$ 44,251	\$ 10,949	\$ 55,200
50377	Ensure Compliance	Inspections/RECLAIM Audits	Audit/Compliance Assurance	1,062,025	262,764	699,059 (a)
60377	Ensure Compliance	Inspections/RECLAIM Audits	Audit/Compliance Assurance	2,480,831	656,911	1,655,709 (a)
60771	Ensure Compliance	Title V	Title V Compl/Inspect/Follow Up	578,860	153,279	732,140
08770	Timely Review of Permits	Title V	Leg Advice: Title V Prog/Perm Dev	12,131	2,190	14,321
08772	Timely Review of Permits	Title V Permits	Leg Advice: New Source Title V Per	12,131	2,190	14,321
27770	Timely Review of Permits	Title V	Dev/Maintain Title V Program	414,660	65,691	480,351
50521	Timely Review of Permits	Perm Proc/Expedited Permit	Proc Expedited Permits (301OT)	708,017	175,176	229,630 (b)
50607	Timely Review of Permits	RECLAIM & Title V	Process RECLAIM & TV Permits	3,276,877	805,811	4,082,687
50774	Timely Review of Permits	TV/Non-RECLAIM	Process Title V Only Permits	3,186,075	788,293	3,974,368
50775	Timely Review of Permits	Title V – Admin	Title V Administration	177,004	43,794	220,798
Total Expense				\$ 11,952,862	\$ 2,967,048	\$ 12,158,583

(a) Total costs are adjusted down by approximately 47% to reflect the percent of RECLAIM facilities that are both Title V/RECLAIM.

(b) Total costs are adjusted down by 74% to reflect the percent of Expedited Permits that are Title V.

Since approximately 53% of all RECLAIM facilities are both Title V/RECLAIM facilities, expenditures for work programs 50377 and 60377 were adjusted down by approximately 47% (Table 4 [reference (a)]) to get the share of those expenses attributed to Title V sources. Also, since 26% of the permits processed under the Expedited Permit work program are Title V permits, expenditures for work program 50521 were adjusted down by 74% (Table 4 [reference (b)]) to get the share of those expenses attributed to Title V sources.

## 2. Title V Additional Program Expenditures

Additional expenditures in the areas of Legal, Planning and Rule Development, Information Management and Science & Technology Advancement that support the Title V program were also included. Only the portion of these expenditures paid for by Annual Renewal Operating fees were included (Table 5).

The additional expenditures in Legal, Planning, Rule Development and Area Sources, and Information Management were adjusted to 15.5% of the total expenditures based on the ratio of Title V annual operating revenue to the total annual operating revenue. In addition, work programs 26068 and 26685 were included because state law allows for the SCAQMD to recover a proportionate share of these costs from Title V sources. The additional expenditures in Science and Technology Advancement were adjusted to the percentage of effort spent on major sources (Table 5).

Table 5 shows that the FY 2017-18 Proposed Budget reflects additional Title V expenditures beyond direct costs listed in Table 4 of \$1,591,188, which is the total of the listed stationary source program expenses attributable to the Title V sources in Legal, Information Management (IM), and Planning, Rule Development and Area Sources (PRA) (\$486,519) plus the total of the listed

stationary source program expenses in Science and Technology Advancement attributable to Title V sources (\$1,104,669). Total Title V program expenditures are therefore the sum of \$12,158,583 from Table 4 above plus \$1,591,188 (from the sum of the charts in Table 5 below). Total expenditures are therefore \$13,749,772.

**Table 5 – Title V Additional Program Expenditures**

WP Code	Program Category	Project Description	Description	Program Expenditures	Total Overhead Allocated	FY 17-18 Annual Renewal Budget Request
08115	Ensure Compliance	Case Disposition	Trial/Dispo-Civil Case/Injunct	\$ 291,145	\$ 52,553	\$ 343,698
08154	Ensure Compliance	Compliance/NOV Administra	Review/Track/Prep NOVs/MSAs	242,621	43,794	286,415
08465	Ensure Compliance	Mutual Settlement	Mutual Settlement Program	727,863	131,382	859,245
Sub-total Legal				\$ 1,261,629	\$ 227,729	\$ 1,489,358
26068	Develop Programs	SCAQMD Projects	Prepare Environmental Assessmen	\$ 238,101	\$ 44,013	\$ 282,114
26685	Develop Programs	Socio-Economic	Apply econ models/Socio-econ	243,764	35,911	279,675
Sub-total Planning & Rule Development				\$ 481,866	\$ 79,924	\$ 561,790
27480	Operational Support	New System Development	Dev sys for special oper needs	\$ 177,489	\$ 32,846	\$ 210,334
27735	Operational Support	Systems Maintenance	Maintain Existing Software Prog	352,330	49,268	401,598
27616	Operational Support	Records Services	Records/Documents processing	399,037	73,902	472,940
Sub-total Information Management				\$ 928,856	\$ 156,016	\$ 1,084,872
Total Expense				\$ 2,672,351	\$ 463,670	\$ 3,136,020

(c) State law authorizes SCAQMD to charge fees to recover the cost of these activities.

Title V - Annual Renewal Revenue	\$ 7,195,363
Total Annual Renewal Revenue (less PERP)	\$ 46,380,074
Title V %	15.5%
Legal, IM and PRA - Title V Expense	\$ 486,519

Additional Title V Expenditures - Science Technology & Advancement (STA)

WP Code	Program Category	Project Description	Description	Program Expenditures	Total Overhead Allocated	FY 17-18 Annual Renewal Budget Request
44064	Monitoring Air Quality	Ambient Network	Air Monitoring/Toxics Network	\$ 518,413	\$ 130,397	\$ 648,809
44546	Timely Review of Permits	Protocols/Reports/Plans	Eval Test Protocols/Compliance	933,695	242,400	1,176,096
44707	Ensure Compliance	VOC Sample Analysis/Compli	VOC Analysis & Rptg/Compliance	1,132,578	285,099	1,417,677
Sub-total						\$ 3,242,582

% of TV	Title V Allocation
25% of 44064	\$ 162,202
50% of 44546	\$ 588,048
25 % of 44707	\$ 354,419
Title V - Science Technology Advancement Expense	\$ 1,104,669

Total Title V permit-program costs are thus \$12,158,583 (direct costs), plus \$486,519 (Legal, IM and PRA), plus \$1,104,669 (Science & Technology Advancement) for a grand total of \$13,749,772 (see Tables 4 and 5).

## B. REVENUE

The EPA Region IX Title V Program Evaluation report noted that “SCAQMD tracks Title V revenue separately from the other revenue collected by the District.” The following sections explain the basis for the revenues reported in the FY 2017-18 Proposed Budget– Title V – Cost Allocation Summary (Table 9).



### 1. Annual Operating Title V Revenue:

The projection for the Annual Operating Renewal fees is based on active Title V facilities with equipment subject to annual billing based on billable permit renewals and billable permit application types. Staff applied the Rule 320 Automatic CPI fee increase of 2.5% to the FY 2016-17 fee schedules and multiplied the new fee to the billable permit renewals and applications to estimate the FY 2017-18 Annual Operating Title V revenue of \$7,781,260.

The following schedules are the proposed estimated Fiscal Year 2017-18 Annual Operating Renewal fees and the calculations for the estimated Fiscal Year 2017-18 Annual Operating Renewal Title V revenue.

**Table 6 – FY 2017-18 Estimated Annual Operating Renewal Fee by Schedule**

Schedule	FY 16-17 Fee	FY 2017-18 Rule 320 2.5% CPI COLA	FY 2017-18 Proposed Budget Fee with 2.5% CPI
	(a)	(b)	(a) + (b)
A1	\$177.09	\$4.43	\$181.52
A, B, & B1	\$354.86	\$8.87	\$363.73
C & D	\$1,270.97	\$31.77	\$1,302.74
E,F,G, & H	\$3,051.76	\$76.29	\$3,128.05
Title V Flat Fee	\$514.49	\$12.86	\$527.35

**Table 7 – FY 2017-18 Estimated Annual Operating Title V Revenue by Fee Schedule**

	# of Permits Subject to Billing	# of Applications Subject to Billing	Billable Permits & Apps	FY 2017-18 Proposed Budget Fee with 2.5% CPI	FY 2017-18 Proposed Title V Annual Renewal Revenue
Schedule	(a)	(b)	(a)+(b)=(c)	(d)	(c)*(d)
A	935	19	954	\$ 363.73	\$ 347,000
A1	-	-	-	\$ 181.52	\$ -
B	3,330	141	3,471	\$ 363.73	\$ 1,262,512
B1	14	4	18	\$ 363.73	\$ 6,547
C	2,375	105	2,480	\$ 1,302.74	\$ 3,230,806
D	715	33	748	\$ 1,302.74	\$ 974,453
E	390	29	419	\$ 3,128.05	\$ 1,310,655
F	44	3	47	\$ 3,128.05	\$ 147,019
G	31	9	40	\$ 3,128.05	\$ 125,122
H	54	2	56	\$ 3,128.05	\$ 175,171
Title V Flat Fee *	383		383	\$ 527.35	\$ 201,976
Sub-total	8,271	345	8,616		\$ 7,781,260

\* There are 383 Title V facilities.

## 2. Permit Processing Title V Revenue

Permit fees are paid for new equipment applications or permit modifications/alterations and will vary from year to year. The projection for Title V Permit Processing revenue is based on the data from Fiscal Year 2015-16 which was the last full fiscal year that permit processing fees were collected. From the base FY 2015-16 data, the 2.4% Rule 320 Automatic CPI fee increase for Fiscal Year 2016-17 was applied to approximately 67% of fees paid in FY 2015-16. Using the factor of 67% is based on the number of current fiscal year permits that were processed in Fiscal Year 2015-16. Once the base for FY 2016-17 was developed, the 2.5% Rule 320 Automatic CPI fee increase for FY 2017-18 was applied to 67% of the fees. Based on past experiences the remaining 33% of fees will be related to permits submitted in earlier years which will have already paid their fees and therefore will not experience the coming year's fee increases.

Table 8 shows the calculations for the projected FY 2017-18, Title V Permit Processing revenue.

**Table 8 – FY 2017-18 Projected Permit Processing Title V Revenue**

Type	App Type	FY 2015-16 Permit Processing Fees Paid	FY 2016-17 2.4% CPI Fee Increase	FY 16-17 Revenue	FY 2017-18 2.5% CPI Fee Increase	Project FY 2017-18 Title V Permit Processing Fees
PC & PO's	10/20/30/60/63/80/85/86/87	\$ 2,456,361	\$ 39,688	\$ 2,496,049	\$ 42,010	\$ 2,538,059
C/O	40	\$ 3,323	\$ 54	\$ 3,377	\$ 57	\$ 3,433.60
Plans	25	\$ 64,677	\$ 1,045	\$ 65,722	\$ 1,106	\$ 66,828.01
Plans Annual Billable	28	\$ 15,743	\$ 254	\$ 15,997	\$ 269	\$ 16,266.48
ERC New	15	\$ 11,988	\$ 194	\$ 12,182	\$ 205	\$ 12,386.84
ERC C/O	16	\$ 15,256	\$ 246	\$ 15,502	\$ 261	\$ 15,763.08
ERC Alteration	17	\$ 1,387	\$ 22	\$ 1,409	\$ 24	\$ 1,433.01
R222 Apps	22/23	\$ 13,735	\$ 222	\$ 13,957	\$ 235	\$ 14,191.95
Totals		\$ 2,582,469	\$ 41,726	\$ 2,624,195	\$ 44,167	\$ 2,668,362

As highlighted in Table 3 and detailed in Appendix C 2, Title V program costs (\$13,749,772) exceed Title V revenues (\$10,449,624), even after increasing the fees by the 2.5% CPI-based fee adjustment. To eliminate the deficit, Title V fees must be increased by 32% (deficit divided by total revenues). Therefore, and in response to the EPA's recommendation, SCAQMD is proposing to raise Title V permit-related fees (annual operating renewal and permit processing) by 16% in each of the next two FYs to fully recover cost at the end of the two year period. To fully recover Title V program expenditures, the 16% fee increase for each of the next two FYs (2017-18 and 2018-19) is necessary and will generate an additional \$1,532,774 (See Appendix C2 in FY 2017-18).

## **VI. NON-TITLE V FEE INCREASE COST ANALYSIS**

### **A. OVERVIEW**

Staff is proposing to increase Permit Processing and Annual Operating permit fees for non-Title V facilities by 4% in both FY 2017-18 and FY 2018-19 for purposes of partially recovering the costs of the permitting program. As explained further below, full cost recovery is not recommended at this time because doing so would require fee increases at a level which would likely create additional compliance and enforcement issues for the District. Staff is proposing that the deficit created by the shortfall in FY 2017-18 continue to be covered by reserves which are ultimately based on penalties and settlements received.

### **B. COST ALLOCATION PROCEDURE**

Appendix C 2 (FY 2017-18 Cost Allocation Summary) shows the distribution of SCAQMD annual operating revenues to cover expenditures. Details show that besides paying for direct compliance activities, annual operating renewal fees are used to pay for the following:

Permit Processing Overhead	\$6,358,199	(Appendix C2 Transfer 1)
Source Testing Shortfall	\$2,027,364	(Appendix C2 Transfer 2)
Hearing Board Shortfall	\$1,423,899	(Appendix C2 Transfer 3)
Portion of Permit Processing Shortfall	\$2,717,108	(Appendix C2 Transfer 6)
Portion of Emissions Shortfall	\$716,010	(Appendix C2 Transfer 6)

After taking into consideration the automatic increase of 2.5% for the change in the CPI, the Title V cost recovery fee increase of 16%, and the transfer of the annual operating renewal fees to cover a portion of the permit processing deficit, the total permit processing deficit remains at \$4,344,056. This deficit is attributable to the non-Title V facilities. A 15% increase to permit processing fees for non-Title V facilities would be required to fully recover these costs. Table 9 shows the FY 2017-18 SCAQMD Proposed Permit Processing Budget (see Appendix C2, Permit Processing Fees Column):

**Table 9 – FY 2017-18 SCAQMD Proposed Budget and Permit Processing Analysis for Non-Title V Facilities**

FY 2017-18 Projected Revenue	\$ 18,700,534	
2.5 Rule 320 CPI Fee Increase	357,221	
16% Title V Fee Increase	287,488	
	<u>\$ 19,345,243</u>	(a)
Expenditures	\$ 32,764,606	(b)
Projected Deficit	<u>\$ (13,419,363)</u>	(a)-(b)=(c)
<u>Transfers</u>		
Annual Operating Renewal Revenue to Pay for Permit Processing Overhead	\$ 6,358,199	(d)
Annual Operating Renewal Revenue to Pay for a Portion of the Remaining Permit Processing Deficit	\$ 2,717,108	(e)
Adjusted Permit Processing Deficit for Non-Title V Facilities	<u>\$ (4,344,056)</u>	(c)+(d)+(e)=(f)
		15% (f)/(a+d+e)

Since a 15% fee increase in permit processing fees is not recommended for these non-Title V facilities, staff is proposing an increase of 4% in each of the next two FYs to non-Title V annual operating and permit processing fees beyond the CPI increase. As reflected in Appendix C1, this additional 4% will generate \$2,069,952 (\$1,772,136 in non-Title V annual operating fees and \$297,816 in non-Title V permit processing fees) in FY 2017-18 and reduce the deficit of \$4,344,056 in permit processing activities for non-Title V facilities. The shortfall will continue to be covered with other revenue.

The additional 4% fee increase in each of the next two FYs in non-Title V annual operating and permit processing fees beyond CPI is based on the FY 2017-18 SCAQMD Proposed Budget Permit Processing deficit of \$4.3M (see Table 10).

**Table 10 – FY 2017-18 SCAQMD Proposed Fee Increase Analysis for Non-Title V Facilities**

Permit Processing Deficit	\$ (4,344,056) (a)
<u>Non-Title V Revenue (prior to above CPI fee increase) *</u>	
Annual Operating Renewal Fees	\$ 44,302,698
Permit Processing Fees	11,059,393
Total Non-Title V Revenue	<u>\$ 55,362,091 (b)</u>
Proposed Fee Increase Over the Next Two Fiscal	8% (a)/(b)

\* The projection for Non-Title V annual operating fees is based on active Non-Title V facilities with equipment subject to annual billing with billable permit application types. The projection for Non-Title V permit processing fees is based on data from FY 2015-16 which was the last full year that permit processing fees were collected.

### C. COSTS SUPPORTED BY PERMIT AND ANNUAL OPERATING FEES

As reflected in Table 9, the total Permit Processing fee supported expenditures for FY 2017-2018 are projected to be \$32,764,606. Estimated permit fee revenue for FY 2017-2018 (with the 2.5% CPI and Title V 16% fee cost recovery increase, but not including the additional 4%) is \$19,345,243, resulting in an initial shortfall of \$13,419,363. Permit processing overhead costs (\$6,358,199) are supported by annual operating fees. Also, surplus annual operating fees (\$2,717,108) are being transferred to support permit processing expenditures. The additional proposed fee increase above CPI will recover an estimated additional \$297,816, leaving a shortfall of \$4,046,240 for FY 2017-2018 (see Appendix C 2 and the following discussion-).

As shown in Appendix C 2, the cost of Work Program activities identified as directly related to compliance activities and charged to the annual operating fee (equipment-based) category is lower than the total revenues from this fee. However, there are other

Permitted Source Program compliance activities that may be and traditionally have been supported by the annual operating permit fee. For example, permitted source testing is necessary for enforcement or compliance activity, yet the SCAQMD has traditionally charged a separate source-testing fee rather than including this expense in the overall annual operating fee, which would be allowed under H&SC Section 40510(b). But there is and traditionally has been a shortfall in source testing fee revenues. For FY 2017-18, the shortfall is estimated at \$2,027,364. Therefore, since the California H&SC would have allowed this entire program to be paid by the annual operating fee, Appendix C 2 shows a transfer of this amount from annual operating fees to support the shortfall in source testing fees.

Similarly, the SCAQMD charges a separate fee for variances and Hearing Board appeals, but these fees are not sufficient to support the entire cost of running the Hearing Board (as shown in Appendix C 2). In past years, concern has been expressed that to raise Hearing Board fees sufficiently to cover the entire costs of the Hearing Board would deter sources from seeking variances when needed and simply “drive them underground.” Yet, the Hearing Board and staff activity associated with hearings on variances is a part of enforcement activities and thus properly recovered by annual operating fees. As a compliance activity, the deficit in Hearing Board revenues is supported by annual operating permit fees, so a transfer of \$1,423,899 is shown from annual operating fees to Hearing Board fees.

Since emission expenditures are attributable to stationary sources, Appendix C 2 shows a transfer of \$716,010 from annual operating fees. This transfer is based on the remaining surplus annual operating fees and prorated by the remaining deficit in permit processing and emissions.

In addition, the SCAQMD has traditionally used annual operating fees to support the deficit in permit processing fees. This deficit is divided into two types. First, there is the proportional share of “allocatable overhead” (e.g., personnel, Finance, Legal, Information Management) that corresponds to the percent of total FTEs that are devoted to permit processing. Staff believes that it is proper to allocate these overhead costs among all District programs on a proportional basis. Also, Staff believes that the equipment-based fee is a proper source of revenue for these expenses, because the equipment-based fee is related both to emissions potential and to complexity of the equipment (i.e., labor associated with enforcement efforts) and is thus related to the burdens the source imposes on the District and the benefits it receives ~~from~~ from being authorized to pollute in specified amounts. The allocation from annual operating to permit fees associated with “allocatable overhead” is \$6,358,199. Secondly, Appendix C 2 shows a transfer of \$2,717,108 to allocate the remaining surplus annual operating fees. This transfer is based on the remaining surplus annual operating fees and prorated by the remaining deficit in permit processing and emissions.

Finally, there still remains a deficit of \$4,344,056 in permit processing fees. After applying the proposed FY 2017-18, 4% fee increase that provides additional revenue of \$297,816, there still remains a \$4,046,240 deficit. This additional revenue of \$297,816 is smaller than 4% of the “total” of “permit processing” fees because some of the estimated revenue earned is from pending applications accepted at prior fiscal years’ fee

rates; additionally, the permit processing category also includes some fees which are not related to processing permits for stationary sources and thus were not increased by 4%, such as asbestos notification fees. Historically, the SCAQMD has used annual operating permit fees to cover the shortfall in permit processing fees. This is a fair and reasonable allocation of these Permitted Source Program Costs as described in that section of this report. It should be noted that even with the allocation of revenues from annual operating fees, there still remains a deficit in permit processing fee revenue, which the proposed budget supports with “other” revenue which may be spent on any SCAQMD program and is not limited to funding certain activities.

Section VI-D, below, sets forth the rationale for proposing not to recover the entire shortfall in permit processing fees from increasing these fees which would require a 15% increase.

Revenue (with the 2.5% CPI and Title V 16% fee cost recovery increase, but not including the additional 4%) from annual operating renewal fees in FY 2017-18 is projected to be \$51,721,280. Annual operating fees support directly related compliance and other regulatory activities. The annual operating fee-supported expenditures for enforcement and compliance activities for FY 2017-18 is \$38,478,700. In addition, annual operating fees cover the overhead portion of permit processing activities (\$6,358,199 in FY 2017-18). Annual operating fees also cover the shortfalls in Source Testing (approximately \$2,027,364) and the Hearing Board (approximately \$1,423,899) since these are both compliance related activities. Staff has projected, for FY 2017-18, the revenues to be generated from each revenue category. These expected revenues are shown in Appendix C 2. In addition, staff has projected the costs that will be incurred under the FY 2017-18 budget for each of the program categories identified in the proposed Work Program that accompanies the Budget. Using the methodology described in Section V, a preliminary allocation of costs to revenue categories is made. As shown in Appendix C 2 and described above, annual operating fees are also used to partially support deficits in three aspects of the Permitted Source Program: Hearing Board, Source Testing and Permit Processing overhead. Appendix C 2 shows “allocations” of revenues from annual operating fees to these categories.

#### **D. WHY NOT INCREASE PERMIT PROCESSING FEES TO FULLY COVER THE SHORTFALL?**

As described in section titled “Comparison of Costs Supported By Permit Processing and Annual Operating Fees Compared to Revenues,” after covering permit processing overhead costs and a portion of permit processing expenditures with annual operating fees, there is still a projected \$4.3 million deficit in permit processing related revenues for the Permitted Source Program in FY 2017-18. Such deficits have existed for over 10 years and have historically been covered in large part by the Permitted Source Program’s annual operating fees, either equipment-based or emissions-based, as well as other revenues. As shown in Table 9, to fully fund permit processing related activities from permit processing fees alone would require an increase of 15%.

Staff does not recommend increasing permit processing fees by this amount, but instead a 4% increase beyond CPI in each of the next two years is proposed. Staff believes that a 15% increase in permit processing fees would likely have two adverse effects. First, these non-Title V sources are typically smaller than Title V sources. As a result staff believes that some sources would be more likely to construct/modify without seeking the required permit, which may be perceived as too expensive. This would result in illegal construction and potential violation of SCAQMD source-specific rules because there would be no SCAQMD review of some proposed projects. Also, it would create an uneven playing field to the disadvantage of sources that obtain required permits.

This will result in increased enforcement costs to bring sources into compliance once they are found. It would likely also result in increased and illegal emissions, contributing to the region's air quality problems. The net result would be an increased burden on the agency's compliance activities and costs, which are largely paid by annual operating fees. Accordingly, it is reasonable to apply some annual operating fee revenue to permit processing activities to avoid increased compliance costs in the future and the corresponding burden on annual operating fees.

Second, higher permit processing fees may deter facilities from replacing older, less-efficient and higher-emitting equipment with newer equipment that meets current "best available control technology" requirements but requires a permit and associated fees. As a result, total regional emissions will be greater than they would be if facilities were incentivized to modernize their equipment. Therefore, the SCAQMD's regulatory job to reduce emissions would be made more difficult, resulting in more stringent controls being needed for all sources. While more efficient, more modern equipment is generally more desirable from the facility's perspective, at some point the costs of modernization can outweigh the perceived benefits, and technologically feasible emission reductions would not occur. SCAQMD staff believes it is important to avoid disincentives to facility modernization that would result from rapid and significant permit processing fee increases. Moreover, a large increase in permit processing fees could hinder economic development. Because permit processing and enforcement activities are both necessary components of the Permitted Source Program, some permit processing costs may be supported with annual operating fees.

Finally, supporting permit processing programs with current annual operating fee revenues simply spreads the payment of permitting costs across time. New facilities obtain the immediate benefit of a lower permit processing fee but thereafter pay a higher annual operating fee than they otherwise would pay. Existing facilities obtain the immediate benefit of a lower permit processing fee but thereafter pay a higher annual operating fee than they otherwise would pay.



## **VII. METHODOLOGY**

### **A. REVENUE CATEGORIES**

The following describes the various revenue categories that support all of the SCAQMD's programs and its entire budget. The Roman numeral assigned below is a unique identification number used in the line item description in the Draft Budget and Work Program, "Work Program" tab and in the Draft Budget and Draft Work Program, Supporting Documentation:

#### **I. ALLOCATABLE**

A portion of SCAQMD revenue goes to offset the operational support costs of the SCAQMD. These costs include activities such as personnel, Payroll, and Information Management. These costs are allocated over the other revenue categories based on FTEs.

#### **II. ANNUAL OPERATING EMISSIONS FEES**

The Lewis-Presley Air Quality Management Act (H&SC Section 40400-40540) authorizes the SCAQMD to collect fees for permitted sources to recover the costs of District programs related to these sources. (H&SC 40410(b)). The SCAQMD initiated an annual operating emissions fees program in January 1978. As the program currently exists, all permitted facilities pay a flat fee for up to four tons of emissions. In addition to the flat fee, facilities that emit four tons or greater (from both permitted and unpermitted equipment) of any organic gases, specific organics, nitrogen oxides, sulfur oxides, or particulate matter, or 100 tons per year or greater of carbon monoxide, also pay fees based on the facility's total emissions. These facilities pay for emissions from permitted equipment as well as emissions from unpermitted equipment and processes which are regulated, but for which permits are not required, such as solvent use. In addition, a fee-per-pound is assessed on the following toxic air contaminants and ozone depleters: ammonia; asbestos; benzene; cadmium; carbon tetrachloride; chlorinated dioxins and dibenzofurans; ethylene dibromide; ethylene dichloride; ethylene oxide; formaldehyde; hexavalent chromium; methylene chloride; nickel; perchloroethylene; 1,3-butadiene; inorganic arsenic; beryllium; polynuclear aromatic hydrocarbons (PAHs); vinyl chloride; lead; 1,4-dioxane; trichloroethylene; chlorofluorocarbons (CFCs); and 1,1,1-trichloroethane. The rates are set forth in SCAQMD Rule 301.

Along with annual operating permit renewal fees, emissions fees are intended to recover the costs of SCAQMD's compliance, planning, rule making, monitoring, testing, source education, public outreach, civil enforcement, and stationary and area source research projects. Historically, compliance-related costs for permitted sources are supported by annual operating permit renewal (equipment-based) fees, while planning, rulemaking, and outreach are supplemented by annual operating emissions-based fees.

### III. PERMIT PROCESSING FEES

Under the H&SC Section 42300, SCAQMD may adopt and implement a program requiring that before the construction or operation of any equipment which emits or controls air pollution in SCAQMD's jurisdictional boundaries, a permit to construct and to operate must be obtained from SCAQMD. SCAQMD has adopted rules requiring such permits to ensure that equipment in SCAQMD's jurisdictional boundaries is in compliance with SCAQMD Rules and Regulations, but exempts certain equipment which is deemed to have de minimis emissions (Rule 219). Permit processing fees are authorized by state law to recover the reasonable costs of the permit program, involving permitting, planning, enforcement and monitoring related thereto. H&SC Section 40510(b). Permit processing fees support the permit processing program and the fee rate schedules for the different equipment categories are based on the average time it takes to process and issue a permit. Each applicant, at the time of filing, pays a permit processing fee which partially recovers the costs for normal evaluation of the application and issuance of the permit to construct and permit modifications. This category also includes fees charged to partially recover the costs of evaluation of plans, including but not limited to Rule 403 dust control plans, and Rule 1118 flare monitoring plans. The permit processing fees also cover the administrative cost to process Change of Operator applications, applications for Emission Reduction Credits, and Administrative Changes to permits. This category also includes a number of specific fees such as Title V permit processing fees, CEQA and air quality modeling fees, and public noticing fees. Finally this category includes some fees that are related to specific activity such as asbestos notification and Rule 222 'registration in lieu of permit.'

### IV. ANNUAL OPERATING PERMIT RENEWAL FEES

State law authorizes the SCAQMD to have an annual permit renewal program and authorizes fees to recover the costs of the program (H&SC Section 42300; 40510(b)). The annual operating permit renewal program, initiated by the SCAQMD in February 1977, requires that all active permits be renewed on an annual basis upon payment of annual renewal fees. The annual renewal rates are established in SCAQMD Rule 301 and are based on the type of equipment, which is related to the complexity of related compliance activity. These annual operating permit renewal fees (Category IV) are separate and distinct from the annual operating emission fees (Category II). For basic equipment (not control equipment) the operating fee schedule also corresponds to some extent to the emission potential of the equipment. Along with annual operating emissions fees, annual operating permit renewal fees are intended to recover the costs of programs such as SCAQMD's compliance program, planning, rule making, monitoring, testing, source education, public outreach, civil enforcement, including the SCAQMD's Hearing Board, and stationary and area source research projects. Historically, compliance-related costs for permitted sources are supported by annual operating permit renewal fees, while planning, rulemaking, and outreach are supported by annual operating emissions-based fees. Additional activities covered by these fees include stationary source technology assessments; and engineering support of other SCAQMD divisions such as planning and

rule development. As previously explained, these fees also support the shortfall in permit processing fees.

#### V. FEDERAL GRANTS/OTHER FEDERAL REVENUE

SCAQMD receives funding from EPA Section 103 and 105 grants to help support the SCAQMD in its administration of active air quality control and monitoring programs where the SCAQMD is required to perform specific agreed-upon activities. Other EPA and Department of Energy (DOE) grants provide funding for various air pollution reduction projects. A Department of Homeland Security (DHS) grant funds a special particulate monitoring program. When stipulated in the grant agreement, the General Fund is reimbursed for administrative costs associated with grant-funded projects. Most federal grants are limited to specific purposes but EPA Section 105 grants are available for the general support of air quality-related programs.

#### VI. SOURCE TEST/ANALYSIS FEES

Revenue in this category includes fees for source tests, test protocol and report reviews, continuous emissions monitoring systems (CEMS) evaluations and certifications, laboratory approval program (LAP) evaluations, and laboratory sample analyses. The revenue recovers a portion of the costs of performing source tests, technical evaluations, and laboratory analyses.

#### VII. HEARING BOARD FEES

Hearing Board revenue is from the filing of petitions for variances and appeals, excess emissions fees, and daily appearance fees. The revenue recovers a portion of the costs associated with these activities. Petitions for Orders of Abatement, which go before the Hearing Board, are filed by the District; therefore, there are no Hearing Board fees/revenue related to these proceedings.

#### VIII. CLEAN FUELS

Section 9250.11 of the Vehicle Code gives the DMV authority to collect and forward to SCAQMD money for clean fuels technology advancement programs and transportation control measures related to motor vehicles, according to the plan approved pursuant to H&SC Section 40448.5. One dollar is collected by the DMV for every vehicle registered in SCAQMD's jurisdictional boundaries, forwarded to SCAQMD, and deposited in the Clean Fuels Program Fund.

Clean fuels fees from stationary sources are authorized by H&SC Section 40512 and are recorded in a separate revenue account within the Clean Fuels Program Fund. Fees are collected from sources that emit 250 tons or more per year of Nitrogen Oxides (NOx), Sulfur Oxides (SOx), Reactive Organic Compounds (ROC), or Particulate Matter (PM). The fees collected are used to develop and implement stationary source activities that promote the use of clean-burning fuels. These activities include assessing the cost effectiveness of emission reductions associated with clean fuels development and use of

new clean fuels technologies, and other clean fuels related projects. The General Fund receives reimbursements from the Clean Fuels Program Fund for staff time and other program implementation/administration costs necessary to implement a Clean Fuels Program.

## IX. MOBILE SOURCES

Mobile Sources revenue is composed of four components: AB2766 revenue and administrative/program cost reimbursements from three programs: Carl Moyer, Proposition 1B and MSRC.

AB2766: Section 9250.17 of the Vehicle Code gives the Department of Motor Vehicles (DMV) the authority and responsibility to collect and forward to the SCAQMD four dollars for every vehicle registered in SCAQMD's jurisdictional boundaries. Thirty percent of the money (\$1.20 per vehicle) collected is recognized in SCAQMD's General Fund as mobile sources revenue and is used for programs to reduce air pollution from motor vehicles and to carry out related planning, monitoring, enforcement, and technical studies authorized by, or necessary to implement, the California Clean Air Act of 1988, or the SCAQMD Air Quality Management Plan. A proportionate share of programs that are not associated with any individual type of source (e.g., air quality monitoring) is supported by these revenues. The remaining monies are used to pay for projects to reduce air pollution from mobile vehicles: 40% (\$1.60 per vehicle) to the Air Quality Improvement Special Revenue Fund to be passed through to local governments and 30% (\$1.20 per vehicle) to the Mobile Source Air Pollution Reduction Fund (MSRC) to pay for projects recommended by the MSRC and approved by the SCAQMD Governing Board (see MSRC below).

Carl Moyer Program: The Carl Moyer Memorial Air Quality Standards Attainment Program (Carl Moyer Program) provides funding from the state of California for the incremental cost of cleaner heavy-duty vehicles, off-road vehicles and equipment, marine, and locomotive engines. The General Fund receives reimbursements from the Carl Moyer Fund for staff time and other program implementation/administration costs, up to specified limits.

Proposition 1B: The Proposition 1B Program is a \$1 billion bond program approved by California voters in November 2006. This incentive program is designed to reduce diesel emissions and public health risks from goods movement activities along California's trade corridors. The General Fund receives reimbursements from the Proposition 1B Funds for staff time and other program implementation/administration costs up to specified limits.

MSRC: MSRC revenue reflects the reimbursement from the Mobile Source Air Pollution Reduction Special Revenue Fund for the cost of staff support provided to the MSRC in administering a mobile source program. These administrative costs are limited by state law to 6.25% and the MSRC adopts a budget for staff support each year.

## X. TOXICS “Hot Spots” (AB2588)

H&SC Section 44380 requires the SCAQMD to assess and collect fees from facilities that emit toxic compounds. Fees collected are used to recover state and SCAQMD costs to collect and analyze data regarding air toxics and their effect on the public. Costs recovered include a portion of the administrative, outreach, plan processing, and enforcement costs to implement this program. These fees are specified by CARB unless SCAQMD adopts a specific AB 2588 fee.

## XI. TRANSPORTATION PROGRAMS

In accordance with federal and state Clean Air Act requirements, SCAQMD’s Rule 2202 – On-Road Vehicle Mitigation Options provides employers with various options to either reduce mobile source emissions generated from employee commutes or implement mobile source emission reduction programs. Employers with 250 or more employees at a worksite are subject to Rule 2202 and are required to submit an annual registration to implement an emission reduction program that will obtain emission reductions equivalent to a worksite specific emission reduction target. The revenue from this category is used to recover a portion of the costs associated with filing, processing, reviewing, and auditing the registrations and the ridesharing programs. Fees for indirect sources, which are sources that attract mobile sources, such as the large employers covered by Rule 2201, are authorized by H&SC Section 40522.5.

## XII. – XIV. REVENUE CATEGORIES ARE NO LONGER USED

## XV. CALIFORNIA AIR RESOURCES BOARD (CARB) SUBVENTION

Under H&SC Section 39800-39811, the state appropriates monies each year to CARB to subvene to the air quality districts engaged in the reduction of contaminants pursuant to the basin wide air pollution control plan and related implementation programs. The SCAQMD received subvention funds, at its inception, beginning in 1977.

## XVI. REVENUE CATEGORY IS NO LONGER USED

## XVII. OTHER REVENUE

Miscellaneous revenue includes revenue attributable to penalties/settlements, interest income, lease income, professional services the SCAQMD renders to other agencies, reimbursements from special revenue funds (non-mobile source), vanpool revenue, fitness center memberships, Public Records Act requests and subscriptions.

## XVIII. AREA SOURCES

Emissions fees from architectural coatings revenue covers architectural coatings fair share of emissions fee supported programs. Quantity-based fees on architectural coatings are also assessed and are designed to support specific architectural coatings programs (such as enforcement). Rule 314 – Fees for Architectural Coatings covers emission-

based fees and quantity-based fees. Beginning in FY 2008-09, annual assessments of architectural coatings, based on quantity (gallons) distributed or sold for use in SCAQMD's jurisdiction and the VOC emissions from subcategories, are included in revenue projections. This revenue allows SCAQMD to recover the costs of staff working on compliance, laboratory support, architectural coatings emissions data, rule development, and architectural coatings revenue collection.

#### **XIX. PORTABLE EQUIPMENT REGISTRATION PROGRAM (PERP)**

The California Air Resources Board (CARB) provides revenues to local air districts, to offset the costs of inspecting equipment registered under CARB's Portable Equipment Registration Program (PERP). Fees for inspection of PERP-registered engines by SCAQMD field staff are collected by CARB at the time of registration and passed through to the SCAQMD on an annual basis. Fees for inspection of all other PERP-registered equipment are billed at an hourly rate set forth in SCAQMD Rule 301, as determined by CARB and collected by SCAQMD at the time the inspection is conducted.

#### **B. ALLOCATING FY 2017-18 COSTS TO REVENUE CATEGORIES**

As part of the annual budget request process, managers from each SCAQMD Office review their Work Plan (Work Program code line items, which identify specific work activities associated with their office) and allocate Full Time Equivalents (FTEs) to each Work Program code, according to their knowledge of the amount of work being done in each Work Program code. One FTE corresponds to 2,080 employee hours. All SCAQMD staff are required to fill out bi-weekly time records, recording the amount of time spent on each Work Program activity code item. The Finance office maintains time records and keeps track of the total time recorded against each code line item.

To assist the managers in allocating their FTEs to Work Program lines when developing the annual budget, a report of actual FTEs for the previous fiscal year and actual FTEs year-to-date for the current year is provided to each office. Managers then compare their projected FTEs with actual FTEs expended on each Work Program line item and make any needed adjustments. Each Work Program code identifies the amount of labor (number of FTE's) budgeted to the activity as well as the dollar amount of labor and other direct costs (e.g., contracts, temporary services, capital outlays) and a prorated share of District General expenditures associated with that activity.

Certain expenditures are allocated over the relevant Work Program lines since they are needed to support the SCAQMD but are not directly related to any particular Work Program code. These include SCAQMD general expenses, office overhead and SCAQMD-wide allocatable costs.

SCAQMD District General expenditures are overhead costs and include utilities, building maintenance, household and insurance costs. SCAQMD District General costs are allocated to each Work Program line based on FTEs. These costs can be found in the Draft Budget and Draft Work Program, under the "District General" tab.

They are allocated over the entire Work Program listing in the “Work Program” tab of the budget, and are not shown separately.

Office overhead expenditures are for administrative activities that serve the office solely. These are prorated over Work Program codes within the specific office based on FTEs in that office. These costs are identified as “Allocatable Office Overhead” in Appendix C 1.

In addition, certain indirect costs of operating the SCAQMD are allocated proportionately over all SCAQMD programs. Many of these programs are identified in the Work Program as “Operational Support” and “Policy Support.” These costs include Personnel, Finance/Payroll, Information Management, Contracts Administration, SCAQMD Governing Board and Committee support, etc. The proportionate share of these costs to be borne by each program is determined by taking each program’s share of the total non-operational support budget and using that same share to determine apportioned costs of operational and policy support based on FTEs. These costs are identified as “Allocatable SCAQMD Overhead” in Appendix C 1. These costs could also be properly attributed to emissions fees. (*San Diego Gas & Electric Co. v. San Diego County APCD, supra.*)

As part of the budget process, an appropriate revenue category or category(ies) is proposed for each Work Program and then reviewed and approved jointly by Office management, Finance and Legal staff. Each Work Program line is “funded,” or assigned a revenue category based on a review of revenue sources that may be appropriate to cover that revenue activity.

A Work Program line may have more than one revenue category assigned to it and each category is evaluated to determine the relative percentage share to be allocated to it. Allocations to revenue source categories are based first on mandates and second on the appropriateness of a certain revenue source to pay for a specific activity. For example, the Finance office maintains a Work Program line item for Clean Fuels Contract Administration, which is funded entirely from Clean Fuels funds. Planning, Rule Development & Area Sources maintains several Work Program lines devoted entirely to Toxics AB2588 activities, including reviewing risk assessments that are paid for by air toxics fees. Other Work Program lines are funded by a combination of sources. For example, development of VOC rules is funded by a combination of emissions-based fees, annual operating fees, and CARB subvention. Some programs which are related to the total amount of emissions in the air, such as meteorology, and regional air quality modeling are allocated in part based on the percent of emissions contributed by mobile and stationary/area sources.

Appendix C 1, “Comparison of the FY 2017-18 Work Program to Cost Allocation Schedule” (as found in the Work Program section of the FY 2017-18 Draft Budget), is the basis for the Proposed Regulation III amendment presented in this report. The comparison identifies allocatable office and allocatable SCAQMD overheads by program category and shows the redistribution to the various program activities. Furthermore, the comparison describes how the Work Program in the FY 2017-18

Draft Budget relates to the FY 2017-18 Proposed Budget - Cost Allocation Summary (see Appendix C 2).

### **C. ESTIMATING THE COSTS OF THE PERMITTED SOURCE PROGRAM BY ALLOCATING INDIVIDUAL WORK PROGRAM CATEGORIES**

The SCAQMD's Work Program is divided into 9 program categories:

- Advance Clean Air Technology,
- Customer Service and Business Assistance,
- Develop Programs,
- Develop Rules,
- Ensure Compliance,
- Monitoring Air Quality,
- Operational Support,
- Policy Support, and
- Timely Review of Permits

However, these functional categories do not represent single programs or revenue sources. For example, the category "Develop Rules" includes 435 individual Work Program codes. The costs of each Work Program line are allocated to one or more revenue categories based upon departmental managements evaluation of the burdens imposed or benefits received by the fee payors of the revenue categories, subject to review by the Finance and Legal departments. However, individual categories, such as the category "Develop Rules" are not all supported by a single revenue source. In the case of Rule Development, this is because multiple programs require rule development activities. Rule development programs include programs as varied as the following:

- 26661 - Rulemaking/RECLAIM (major stationary sources) - costs allocated 100% to emissions-based fees
- 44456 - Implement Fleet Rules – costs allocated 100% to Clean Fuels revenues
- 26460 - Modeling SCAQMD Regional – costs allocated 77% to mobile source revenues, 16% to emissions-based fees and 7% to EPA Grant

In the last case (regional modeling), the program costs are allocated based on the relative share of total pollution caused by mobile sources compared to stationary and area sources. Similar formulas are used in a number of Work Program categories.

Similarly, the Work Program category "permit" includes items that are funded by annual operating fees, such as 44546 "Evaluate Test Protocols Compliance."



Although the work is done by engineers (in the source test group), it is more closely related to compliance, and thus allocated to annual operating fees.

Total costs of the Permitted Source Program can be determined by looking at the individual Work Program codes discussed above. Staff has created Appendix C 4 which lists all the Work Programs funded by each revenue source. Because many Work Program codes are funded by more than one revenue source, they will appear more than once.

#### **D. BASIS OF ALLOCATING PERMIT PROCESSING COSTS TO THE PERMIT FEE SCHEDULES**

The SCAQMD has assessed fees for processing of permit applications for many years, and the fees have traditionally been based on the type of equipment and complexity of engineering review. The permit processing fee schedules were revised in 1990 as a result of a Fee Assessment Study performed by KPMG Peat Marwick. As stated in the May 1990 staff report for the fee rule amendments, the original permit processing fee schedule was established by the Los Angeles County APCD in 1957. It was modified in 1990 in response to the Fee Study, incorporating eight separate schedules, based on the complexity of evaluations to assure rule compliance.<sup>8</sup> From time to time, new types of equipment are added to the fee schedules, or certain types of equipment may be moved from one fee schedule to another as staff experience with actual permit processing reveals that a different category is more appropriate. As of FY 2016-17, the fee schedules range from about \$1,600 to process a permit for a smaller source such as a dry cleaner (Schedule A) to about \$28,600 (Schedule H) for a complex source such as sulfur recovery equipment. For the largest three categories, a time and materials component (hourly rate) is added for hours worked over a specified number of hours (182 hours for Schedule H), with a specified maximum.

About 6% of the applications processed are eligible for a small business discount, which is 50% of the regular fee. A small business is defined in SCAQMD Rule 102 - Definitions.

The SCAQMD re-evaluated the accuracy of its permit processing fee schedules over a two-year period from CY 1999-2001. Engineering staff kept track of the number of permits processed in each fee schedule as well as the number of hours spent representing over 5,300 permits processed. Very few applications were processed for the larger schedules F, G, and H, so it is more difficult to be sure the time spent per application is representative, and it makes sense for those schedules to include a time and materials component, for actual hours spent in excess of the time assumed in the basic fee schedule.

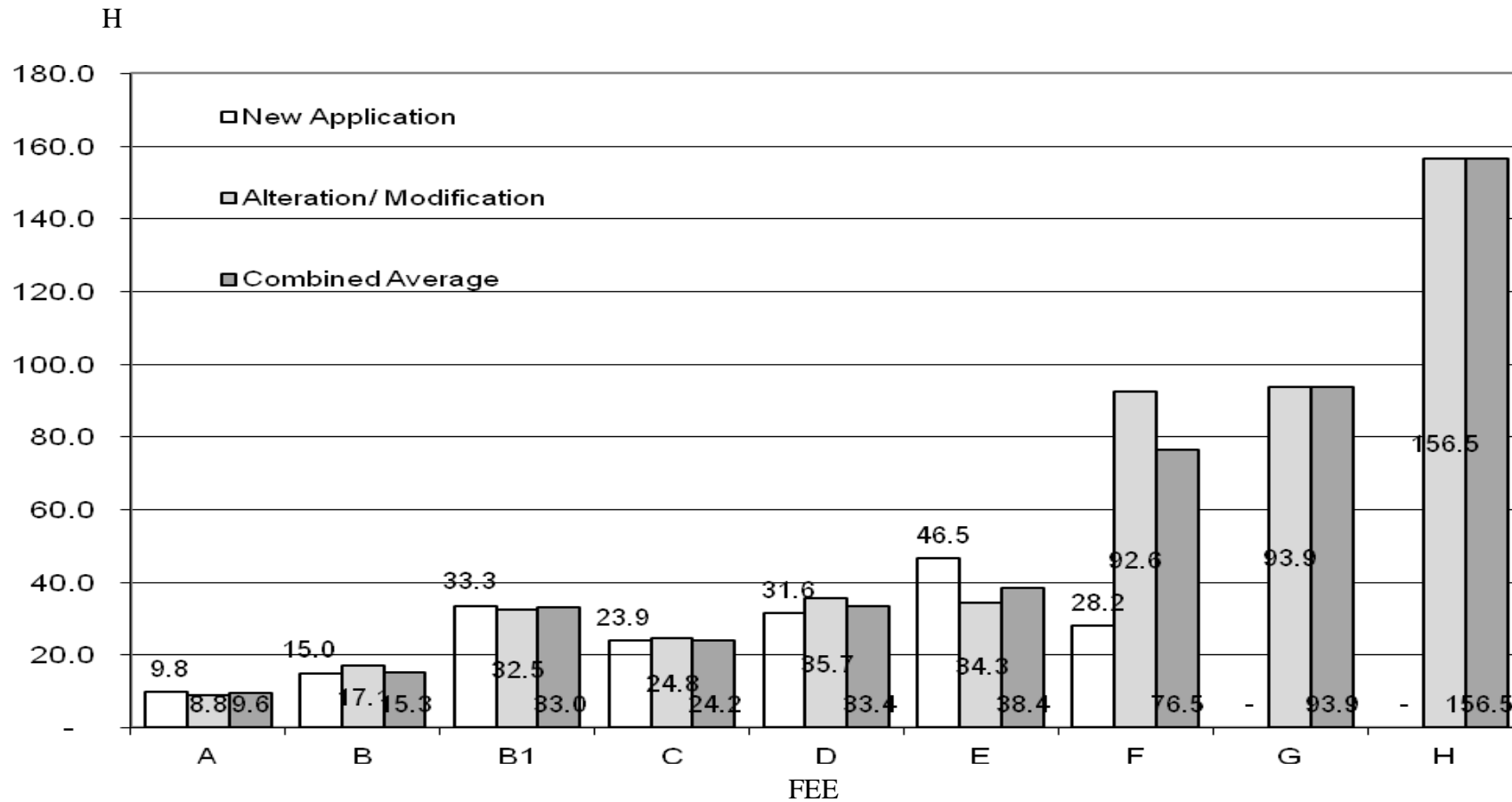
Staff calculated the average number of hours for each fee schedule by type (initial permit, alteration, and change of condition) from Sept. 6, 1999 to Aug. 6, 2000 (see

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<sup>8</sup> May 24, 1990 staff report, p. 6

Figure 1). Staff then adjusted the actual hours spent on permit processing to account for the fact that some engineering hours are spent on other activities (see Figure 2).

**Figure 1: Time Tracking Mean Hours Comparison – New Applications, Alteration/Modification and Combined Average (Sept. 6, 1999 to Aug. 6, 2000)**



**Figure 2: Permit Processing Payroll Hours (Sept. 6, 1999 to Aug. 6, 2000)**

Pay Code	Description	Hours	Percent
50360	GREEN CARPET PROGRAM	127.25	0.08%
50367	HEARING BOARD/APPEALS	889.75	0.54%
50515	Permt Proc/Compliance	56,782.25	34.52%
50517	Permt Proc/NSR	2,975.50	1.81%
50518	PERMIT PROCESSING/RECLAIM	14,047.00	8.54%
50519	PERMIT PROCESSING/TITLE I	473.50	0.29%
50521	PERMIT PROC/EXPEDITED PER	6,799.25	4.13%
50774	TITLE III/ V PERMITS/COMP	12,316.25	7.49%
50775	TITLE III/TITLE V PERMITS	254.00	0.15%
	Total Permit Processing	94,664.75	57.55%

Figure 2 shows that during that time, 57.55% of engineering hours were spent actually permit processing. As shown, in Figure 3, the largest amount of time spent on an activity other than actual permit processing was “INTERNAL COMMUNICATIONS”, a category which at that time included activities such as staff meetings, meetings with supervisors and other staff on technical matters related to the initial application and other issues, etc. Additional time was spent on activities such as pre-application permit processing activities (e.g., meetings with companies before they submit an application), source education, supporting Information Management, RECLAIM implementation, and, in very small amounts, other activities.

**Figure 3: All Engineering Payroll Hours (Sept. 6, 1999 to Aug. 6, 2000)**

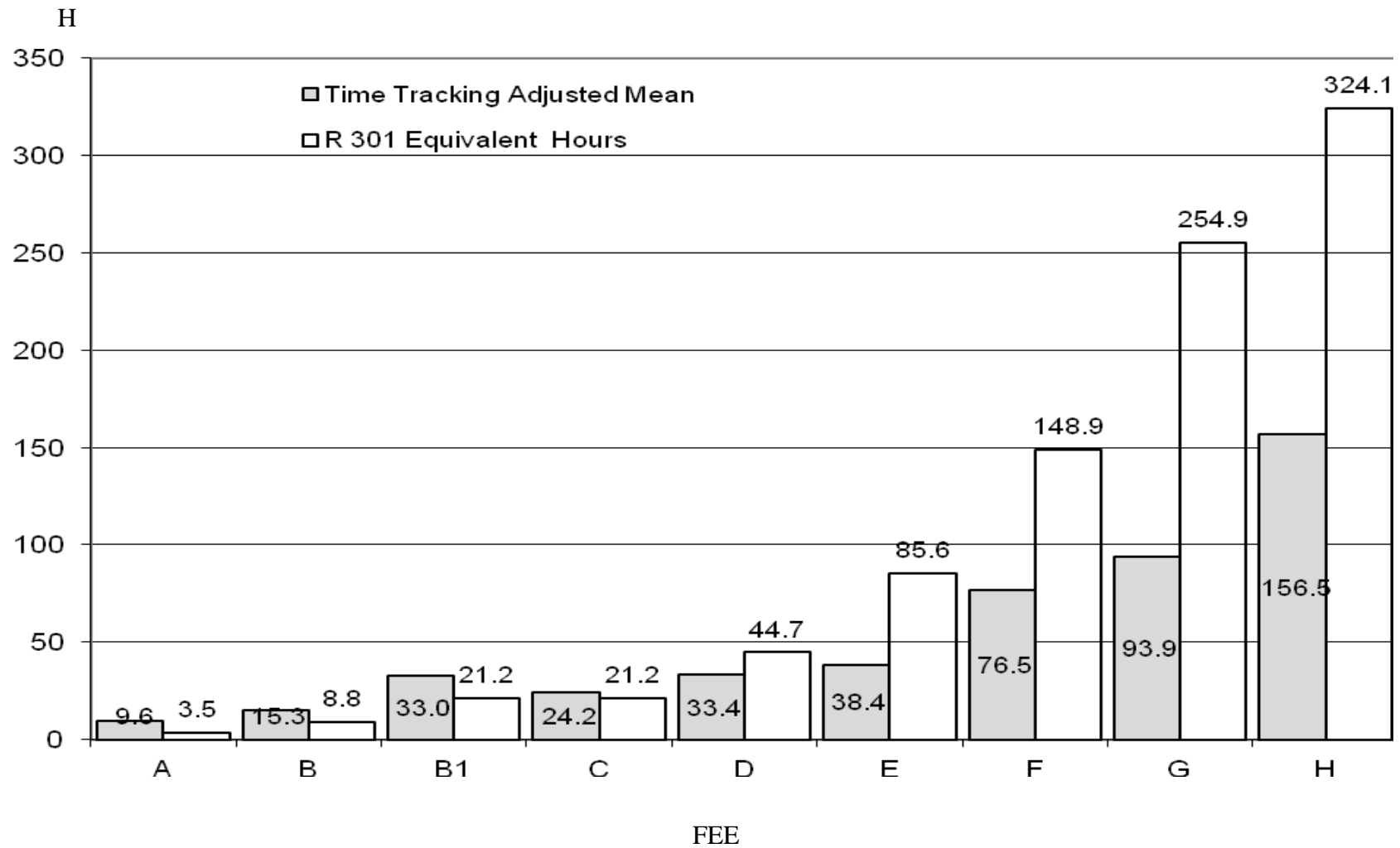
Pay Code	Description	Hours	Percent
	Total Permit Processing	94,664.75	57.55%
50805	TRAINING	1,244.00	0.76%
50047	ADMIN/RESOURCE MANAGEMENT	871.00	0.53%
50155	COMPLIANCE GUIDELINES	324.50	0.20%
50156	COMPLIANCE/SUPPORT	3,845.25	2.34%
50157	COMPLIANCE/SPECIAL PROJEC	3,535.50	2.15%
50365	HEARING BOARD	1,223.25	0.74%
50375	INSPECTIONS	200.00	0.12%
50395	INTERNAL COMMUNICATIONS	27,300.25	16.60%
50425	Lobby Permit Services	758.75	0.46%
50475	NSR Implementation	1,588.50	0.97%
50476	NSR DATA CLEAN UP	791.50	0.48%
50520	PERMIT PROC/PRE-APPLICATI	8,294.00	5.04%
50565	Public Records Act	1,130.25	0.69%
50605	RECLAIM/Implementation	5,397.25	3.28%
50650	Rulemaking	1,609.00	0.98%
50657	RULEMAKING SUPPORT	600.25	0.36%
50690	Source Education	5,834.00	3.55%
50728	SUPPORT IM	4,944.50	3.01%
50771	TITLE V INSPECTIONS	327.50	0.20%
	Total	164,484.00	100.00%

To make the permit processing fees large enough to recover the costs of these activities, staff then divided the mean hours by 57.5% to obtain the number of hours staff needed to recover costs for each fee schedule. Next, staff determined the average revenue per application in each fee schedule. A weighted average was used based on the percentage of applications in that fee schedule that were initial applications, alterations, and change of condition. Then, staff calculated the equivalent number of hours recovered by each weighted average fee, using the then-current average burdened cost (direct cost plus overhead) per engineering hour of \$87.40 (see Figure 4 which shows the average revenue compared to the average cost).

The 1999-2000 Fee Study came to the following conclusions:

- Figure 3 illustrates that alterations/modifications required about the same amount of time as a new application. This is due to the fact that alterations/modifications required the same amount of review and processing as a new permit because the same review is required: new source review, source specific rules, background of the source, toxics, and others. As such, alteration/modifications typically reflect process/equipment modifications and changes which require extensive engineering analysis.
- As shown in Figure 4, the SCAQMD significantly under collected revenue compared to program costs for Schedules A and B. For example, staff was spending approximately 9.6 hours processing an application in Schedule A and the permit processing fee only recovers 3.6 hours or 37.5% of actual time spent. Approximately 2,400 permits were processed annually in Schedule A, resulting in a shortfall of approximately \$1.2 million dollars. Similar discrepancies occur with Schedules B, B1 and to some extent with Schedule C applications that further exacerbated the cost under recovery. The cumulative cost under recovery was quite significant since Schedules A, A1 and B permit applications represented more than 90% of the permitting activity and more than 45% of the permit processing fees collected. In short, if Schedule A were to be adjusted to recover its full costs, it would have been necessary to be increased to a weighted average of nearly \$874 (10 hours x \$87.40) per application.
- Although not many permit applications were received in categories D through H, the data from the time tracking study indicated that the permit processing fees at that time may have exceeded the staff hours needed. As such, staff proposed reductions in the basic fee rates for those categories. The proposal included a capped time and material surcharge for especially difficult applications that require processing time above the norm. As the time and material surcharge is capped, the actual fee was designed so as to not exceed the then existing fee rate in CY 2001.

**Figure 4: Time Tracking vs. Rule 301 Equivalent Hours for Combined New Applications and Alterations/Modifications (Sept. 6, 1999 to Aug. 6, 2000)**



Accordingly, in the 2001 amendments to Rule 301, the SCAQMD began the implementation of a two-pronged approach to adjusting the fee schedules: the fees for the lower fee schedules (A-C) were raised, while the fees for the higher fee schedules (D-H) were lowered, to reflect the average hours per weighted average application in each fee schedule. Since any fee increase over CPI for permit fees needs to be phased in over two years, it was decided to phase in both the fee increases and the fee decreases over a period of two years. Importantly, the three largest fee schedules (F, G, and H) retained a time and materials component so that if the actual cost to process a particular permit exceeded the presumed average, it would still be recovered (subject to a “not to exceed” amount.) This T & M element helps to ensure that the relative proportions between the amounts charged for the larger and smaller permits remains appropriate. The changes adopted in 2001 were designed to recognize the actual program costs associated with processing certain applications and to provide a fair and equitable program.

#### **E. ADDITIONAL RECOMMENDATIONS FROM THE 1999-2000 FEE STUDY**

##### **1. Consolidate fees charged to process new permits and alterations/modifications.**

The internal time tracking study conducted by SCAQMD staff indicated that on the average an equivalent amount of time is spent to process a new permit and a modification/alteration typically involve a process change requiring engineering analysis (see Figure 2). Therefore the two different processing fees charged for each of the activities were no longer justified. The proposal consolidated the two fee rates for new permit processing and modification/alteration into one. The change of condition fee was increased by the consumer price index.

##### **2. Adjust Title V and RECLAIM Fees.**

Adjustments were made to more accurately reflect time required for processing RECLAIM and Title V activities. The data from the time tracking study indicated that on average an engineer spends 28% more time on processing RECLAIM/non-Title V, 44% more time on Title V/non-RECLAIM type applications and 89% more time on RECLAIM/Title V applications when compared to a non-RECLAIM/non-Title V application. A Facility Permit Amendment processing fee of \$550.00 for Title V facilities (\$1,100 for Title V facilities that are also RECLAIM facilities) was proposed to recover the permit processing costs. These fees were in addition to the sum of the applicable fees assessed for each affected equipment in the RECLAIM and/or Title permit. In addition, the administrative permit revision fee was revised to \$544.00 and the de minimis/significant permit revision fee was revised to \$320.00 to more accurately cover time and materials expenditures.

Since that time, the basic fee structure for permit processing has remained the same, and any increases have been made as a percentage increase across-the-board to reflect the relative burdens imposed by each fee schedule. However,



from time to time new equipment is added to a fee schedule, or equipment is moved from one schedule to another, based on permit processing experience. Staff presently has no reason to believe that the relative proportions of the various fee schedules is incorrect, since it was supported with ample data in 2001 and has only changed by across-the-board percentage increases since that time.

### **VIII. BASIS OF ALLOCATING PERMIT PROCESSING, ENFORCEMENT, AND OTHER REGULATORY COSTS TO ANNUAL OPERATING FEE SCHEDULE.**

As described above, the SCAQMD implements two types of annual operating fees, the equipment-based fee and the emissions-based fee. As noted above, these fees are generally used for permitted-source related planning, rulemaking, enforcement, public outreach, and air monitoring activities. However, the H&SC does not require these Permitted Source Program activities be supported by different types of fees, so there is some overlap between the activities supported by emissions-based fees and those supported by the annual operating equipment-based fees. Finally, there are some area source emissions (e.g., use of solvents regulated by Rule 1171) for which facilities pay emission fees, so some area source related work can also be supported by emission fees. The Work Program codes that are generally supported by annual operating fees are those primarily related to compliance and enforcement related to permitted sources, including legal department enforcement work. Additional work that is imposed by permitted sources, such as implementing the Public Records Act, has been allocated to this fee because the majority of Public Records Act requests relate to existing permitted sources. The SCAQMD retained a consultant in 1990, KPMG Peat Marwick, to perform a Fee Assessment Study. Staff believes that the legislature intended that permit fees recover the reasonable costs of all activities related to permitted sources, since the legislature frequently imposed new state mandates, yet, as observed by a 1994-1995 SCAQMD Fee Study also performed by KPMG Peat Marwick, “each of these mandates stated that state funding was not required because the SCAQMD had the ability to raise fees to cover the costs of the increased mandates” (1995 Fee Study, p. 2-11).

One difficulty with the emissions-based fee is that, as emissions from permitted sources are reduced, the fees are reduced, even though the associated work has not been reduced or has even increased. Thus for example, according to the 1990 KPMG Peat Marwick Fee Study, emission fees in 1989-1990 amounted to \$30.5 million (Table IV-1, p. IV-2). In contrast, for FY 2017-18, it is projected that emissions-based fees will amount to about \$19.5 million, which is only about \$12.1 million in 1990 dollars. Because emissions are dropping, it is not feasible to increase this revenue source significantly without substantial increases in fee rates.

In contrast, the annual operating equipment-based fee represents a more stable source of income, because the total amount of permitted equipment remains more stable from year to year than the total amount of emissions. This fee was revised and established in largely its current form in 1990. The fee study consultant (KPMG Peat Marwick) advised staff

that the two most appropriate bases for assessing fees would be costs of service and emissions or emissions potential. Staff recommended that the annual operating fee continue to be divided into two parts, one part cost based and one part emissions-based.<sup>9</sup> The proposed two-part annual operating fees were intended to pay the costs of all SCAQMD Permitted Source Program operations other than permit processing. SCAQMD actions related to mobile sources, and certain other programs that were otherwise funded (e.g., by USEPA grants) were not included. See 1990 KPMG Peat Marwick report, page 5.

Each type of equipment was assigned to one of three fee levels, to equitably assign operating fee rates. See 1990 KPMG Peat Marwick report, page 5. The annual operating fees were established based on equipment complexity and level of service (May 24, 1990 SCAQMD Governing Board Letter, p. 2). The fee rule as adopted made the initial assignments as follows: equipment assigned to permit processing fee Schedule A and B was to be charged \$150, equipment appearing in Schedules C and D was to be charged \$500, and equipment appearing in Schedules E, F, G, and H was to be charged \$1,200. A separate fee was provided for service stations. Since then, a new Schedule A1 was added but there are no longer any types of equipment assigned to that category.

The current proposed amendment would result in continuing the existing four categories of equipment, and adding separate fee schedules for non-Title V and Title V facilities as shown in Table 11:

**Table 11 –SCAQMD FY 2017-18 PAR 301(d)(2) – Annual Operating Fees**

<b>Equipment/Process Schedules in Tables IA and IB</b>	<b>Non-Title V Annual Operating Permit Renewal Fee</b>	<b>Title V Annual Operating Permit Renewal Fee</b>
<b>A1</b>	\$188.78 for FY 2017-18 and \$196.33 for FY 2018-19 and thereafter	\$210.56 for FY 2017-18 and \$244.25 for FY 2018-19 and thereafter
<b>A, B, and B1 (excluding Rule 461 liquid fuel dispensing nozzles)</b>	\$378.28 for FY2017-18 and \$393.41 for FY2018-19 and thereafter	\$421.93 for FY2017-18 and \$489.44 for FY2018-19 and thereafter
<b>C and D</b>	\$1,354.85 for FY2017-18 and	\$1,511.18 for FY2017-18 and

<sup>9</sup> May 1990 Staff Report, p.4

<b>Equipment/Process Schedules in Tables IA and IB</b>	<b>Non-Title V Annual Operating Permit Renewal Fee</b>	<b>Title V Annual Operating Permit Renewal Fee</b>
	\$1,409.05 for FY2018-19 and thereafter	\$1,752.97 for FY2018-19 and thereafter
E, F, G, and H	\$3,253.18 for FY2017-18 and \$3,383.30 for FY2018-19 and thereafter	\$3,628.54 for FY2017-18 and \$4,209.11 for FY2018-19 and thereafter

Note that there is a separate fee for service stations which is charged on a per product dispensed per nozzle basis as shown in the last row of the same table:

Rule 461 liquid fuel dispensing system	\$111.83 for FY2017-18 and \$116.31 for FY2018-19 and thereafter per product dispensed per nozzle	\$124.74 for FY2017-18 and \$144.70 for FY2018-19 and thereafter per product dispensed per nozzle
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The basic fee structure, with smaller fees charged to less complex equipment, and larger fees to more complex equipment, is reasonably related to the regulatory burdens imposed by the equipment. Staff believes it would not be feasible to determine each facility's proportional regulatory cost on an individual facility-by-facility basis. To actually charge each facility the burdened costs of enforcement, solely related to that facility, would be administratively infeasible as it would require keeping detailed data, regarding inspection time, preparing separate invoices and ensuring payment. This would result in a very unstable revenue stream, and could make the SCAQMD vulnerable to claims that it unnecessarily increased its enforcement activity related to a source in order to increase its revenue. These reasons have been held sufficient to allow a public agency to estimate flat fees for particular types of services within broad categories rather than keeping track of and billing the exact time spent on each project. *Griffith v. City of Santa Cruz* (2012) 207 Cal.App.4th 982, 997; *California Assoc. of Prof. Scientists v. Dept. of Fish & Game*, 79 Cal. App. 4<sup>th</sup> 935 (2000).

## IX. IMPACT ASSESSMENT

### A. SCAQMD

For FY 2017-18, the 2.5% across-the-board CPI adjustments in Regulation III fees, (other than fees excluded) commensurate with the change in the CY 2016 CPI, will result in \$2.1 million partial cost recovery for FY 2017-18 (see Appendix C 2 for detailed information).

Furthermore, the additional fee increase beyond CPI for Title V and non-Title V permit processing and annual operating fees would be increase would result in additional revenues as shown in Table 11.

**Table 11 - Estimated Incremental Program Cost Recovery In Addition to 2.5% CPI (in 000's) for FY 2017-18 and FY 2018-19**

<u>Title V</u>	FY 2017-18	FY 2018-19 <sup>10</sup>
<b>Proposed Additional 16% Amendment</b>	<b>1<sup>st</sup> Year</b>	<b>2<sup>nd</sup> Year</b>
Permit Processing Fees	\$287	\$324
Annual Renewal Fees	\$1,245	\$1,483
<b>Total</b>	<b>\$1,532</b>	<b>\$1,807</b>

<u>Non-Title V</u>		
<b>Proposed Additional 4% Amendment</b>	<b>1<sup>st</sup> Year</b>	<b>2<sup>nd</sup> Year</b>
Permit Processing Fees	\$298	\$311
Annual Renewal Fees	\$1,772	\$1,891
<b>Total</b>	<b>\$2,070</b>	<b>\$2,202</b>

In total, additional cost recovery beyond the CPI for FY 2017-18 is estimated to be \$3.6 million. The proposed fees for FY 2018-19 represent a 16% increase for Title V programs and a 4% increase for non-Title V programs from the proposed fees for FY 2017-18.

Overall, for a number of years, SCAQMD has reduced staffing, services and supplies, and capital outlay expenditures to reduce operating expenses, while continuing to meet the requirement for attainment of federal, state and local clean air program goals and objectives. The increased Permit Processing and Annual Renewal Fees together with revenues from the unrestricted “Other” revenue sources will allow the SCAQMD to more fully recover the costs of its Permitted

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<sup>10</sup> It is also expected that there will be an adjustment for the change in the CPI in FY 2018-19 pursuant to Rule 320, but that adjustment factor will not be known until mid-January 2018 when CY 2017 CPI information is typically available.

Source Program activities for SCAQMD's Work Programs which is referenced in Section VII C.

## **B. INDUSTRY / SOCIO-ECONOMIC IMPACT**

Draft socioeconomic assessments have been prepared as separate reports and provide an analysis of the impacts on industry of the proposed rule amendments increasing fees for Rules 301, 303, 304, 304.1, 306, 307.1, 308, 309, 311, 313, 314 and 315. The Rule 320 Resolution adopted by the SCAQMD Governing Board (SCAQMD) on October 29, 2010, requires staff by March 15<sup>th</sup> "...to annually prepare a socioeconomic impact analysis, of the effect of an automatic adjustment based on the California Consumer Price Index [CPI]..." This draft analysis was made available for the public on March 15, 2017 and can be located at <http://www.aqmd.gov/home/regulations/rules/proposed-rules#REG III>.

In addition, staff is proposing a fee increase for Title V facilities of 16% in FY 2017-18 and an additional 16% increase in FY 2018-19 for permit processing and annual operating fees and for non-Title V facilities, a 4% fee increase in FY 2017-18 and an additional 4% increase in FY 2018-19 for non-Title V permit processing and annual operating fees. This draft analysis was made available for the public on April 11, 2017 and a revised draft analysis was made available to the public on May 2, 2017 and these documents can also be located at <http://www.aqmd.gov/home/regulations/rules/proposed-rules#REG III>. The finalized version of these documents will be available on June 2, 2017.

## **C. CALIFORNIA ENVIRONMENTAL QUALITY ACT**

SCAQMD staff has reviewed the proposed project, pursuant to CEQA Guidelines § 15002(k) – General Concepts, the three-step process for deciding which document to prepare for a project subject to CEQA and CEQA Guidelines § 15061 – Review for Exemption, procedures for determining if a project is exempt from CEQA. With respect to the proposed amendments to Rules 301, 306, 308 and 314 which are identified as being strictly administrative in nature, it can be seen with certainty that there is no possibility that the proposed project may have a significant adverse effect on the environment. Thus, the project is considered to be exempt from CEQA pursuant to CEQA Guidelines § 15061(b)(3) – Activities Covered by General Rule. Additionally, the proposed amendments to Rules 301, 303, 304, 304.1, 306, 307.1, 308, 309, 311, 313, 314, and 315 reflect increases in fees, and the proposed administrative amendments to Rules 301, 306, 308, and 314 also involve fees charged by the District, such that the proposed project is statutorily exempt from CEQA requirements pursuant to CEQA Guidelines § 15273 – Rates, Tolls, Fares, and Charges, because the proposed amendments to Rules 301, 303, 304, 304.1, 306, 307.1, 308, 309, 311, 313, 314 and 315 involve charges by public agencies for the purpose of meeting operating expenses, purchasing supplies, equipment and materials, and meeting financial reserve requirements, all as specified in the Salary and Benefits, Services and Supplies, and Capital Outlays set forth in the Proposed Budget for FY 2017-18 and the budget forecast for FY 2018-

19. A Notice of Exemption has been prepared pursuant to CEQA Guidelines § 15062 – Notice of Exemption. If the project is approved, the Notice of Exemption will be filed with the county clerks of Los Angeles, Orange, Riverside and San Bernardino counties.

## **X. FINDINGS**

Before adopting, amending or repealing a rule, the SCAQMD Governing Board shall make findings of necessity, equity, authority, clarity, consistency, non-duplication, and reference, as defined in H&SC Section 40727. The draft findings are as follows:

### **A. NECESSITY**

The SCAQMD Governing Board has determined that a need exists in order to support necessary clean air programs, to amend Regulation III – Fees, including Rules 301, 303, 304, 304.1, 306, 307.1, 308, 309, 311, 313, 314 and 315 to fund the Fiscal Year 2017-18 Budget.

The large majority of the SCAQMD's air quality programs are mandated by statute. Legal mandates for each item in the SCAQMD's Work Program are discussed and identified in the supporting documentation for the Work Program. Even programs not expressly mandated by statute are programs adopted to improve air quality and reduce exposure to unhealthful levels of air pollution, which is the SCAQMD's primary purpose as expressly stated in the H&SC, and hence are reasonably necessary. Ample opportunity is provided through the Budget Advisory Committee and public workshops for the SCAQMD Governing Board to receive public input concerning whether any of the budgeted programs are not reasonably necessary. The SCAQMD Governing Board's finding of necessity will be based on the final budget and facts in the record.

A total \$7.1 million revenue shortfall is projected in FY 2017-18 for programs supported by permit processing fees, even after annual operating fees pay for overhead costs associated with permit programs (see Appendix C 2). The shortfalls were identified during initial development of the FY 2017-18 Draft Budget and Work Program. The Work Program has been refined over several decades and tracks, by program category, the number of hours SCAQMD employees spend on each activity and tracks costs associated with those activities. In addition, to determine fully burdened costs, overhead costs such as utilities, debt service, insurance, and payroll which benefit all programs, are allocated to each activity based on the number of FTEs for that activity. Program categories tracked by the Work Program include:

- Advance Clean Air Technology,
- Customer Service and Business Assistance,
- Develop Programs,
- Develop Rules,

- Ensure Compliance,
- Monitoring Air Quality,
- Operational Support,
- Policy Support, and
- Timely Review of Permits

Every SCAQMD expenditure, including expenditures for employee salaries and benefits, is tracked in the Work Program.

Both the 1993 Assessment of Alternative Long-Term Funding Options study conducted by KPMG Peat Marwick, management consultants, and the 1999 Fee Structure Study, conducted by Thompson, Cobb, Bazilio & Associates, Certified Public Accountants and management consultants, contained findings that SCAQMD was not recovering its program costs and should raise fees to cover program costs. Since 1993, the SCAQMD has, in all but nine fiscal years, limited fee increases to the change in the California Consumer Price Index (CPI). However, during this same time period, program costs increased at rates that far exceeded revenue increases due to the change in the CPI, especially since the real purchasing power of emissions fees declined dramatically. The program's overhead cost increases were, to a large extent, attributable to significant increases in legally-mandated retirement contributions to SBCERA, most notably since 2009 when the economic downturn resulted in market losses for the retirement system. Increased building operations/improvement costs for the aging Headquarters building have also impacted program costs. To reduce overhead program costs yet continue its program commitments, despite new federal and state air quality mandates and increased workload complexity, the SCAQMD has continued to streamline its operations. In June 2004, the SCAQMD issued pension obligation bonds to finance a portion of its outstanding retirement obligation, over time saving more than \$20 million in interest costs. In June 2013, Installment Revenue Bonds associated with the financing of the Headquarters building were retired one year early, also saving on interest costs. Recently, the SCAQMD negotiated changes to its labor contracts, shifting a portion of retirement burden to current employees and reducing retirement benefits for new employees. Additionally, retirement benefits for new employees have been reduced due to state legislation (AB 348) which will result in a substantial savings over time. Other cost containment measures taken over the past several years include reduced services and supplies costs, and an increased vacancy rate. Compared to FY 1991-92, the FY 2017-18 proposed budget reflects staffing levels that are 31% (377 FTEs) below FY 1991-92 levels. Adjusted for inflation, the FY 2017-18 budget request is 25% less than FY 1991-92.

The fee increases proposed for FY 2017-18 will allow the SCAQMD to maintain the current level of services without cuts and will move the agency toward more closely, but not fully, recovering program costs. The SCAQMD regulates approximately 27,400 facilities in its jurisdiction. The agency's fee structure reflects varying levels of effort, based on equipment type and level of complexity. Of the approximate 27,400 facilities regulated by the SCAQMD, 80% of the

facilities have only one or two Permits to Operate, for equipment at the lowest fee schedules. For a typical non-Title V facility, such as a dry cleaner, with only one Permit to Operate at the lower schedule A fee rate, the FY 2017-18 Annual Operating Permit Renewal fee pursuant to Rule 301(d)(2) would increase by less than \$24 in the initial FY 2017-18 and slightly over \$15 in the second FY 2018-19. This facility would also pay a FY 2017-18 annual flat emissions fee for up to 4 tons of emissions, and the proposed increase for this fee would be slightly over \$3. The total annual fee increase for this facility based on these fees would be under \$17, which is an average of \$1.42 per month. As shown in Table 13, the increase in fees for FY 2017-18, for some examples of typical smaller-sized Title V sources ranges from \$1,460 to \$2,100; for typical medium-sized Title V sources ranges from \$5,300 to \$6,800 and for larger-sized sources such as refineries could be \$100,000 or more.



**Table 13 – Examples of Estimated FY 2017-18 Fee Increase for Title V Sources**

	Fee Increase:	2.50%	2.50%	4.00%	16.00%	
		CPI-Based Fee Increase		Additional Fee Increase (includes CPI)		
	FY 16-17 Amount	RECLAIM Device	Other	RECLAIM Device	Title V	Estimated Increase
<b><u>SMALL TITLE V FACILITY EXAMPLES</u></b>						
<b><u>Example 1 - Graphic Arts Facility</u></b>						
Flat Emissions Fee	\$ 124.35		\$ 3.11	\$ -	\$ -	\$ 3.11
Title V Facility Fee	\$ 514.49		\$ 12.86	\$ -	\$ 84.38	\$ 97.24
Annual Operating Renewal Fee	\$ 6,858.18		\$ 171.45		\$ 1,124.74	\$ 1,296.20
Annual Emissions Reporting	\$ 2,341.44		\$ 58.54	-	\$ -	\$ 58.54
Hot Spots	\$ 202.57		\$ 4.19	-	\$ -	\$ 4.19
	\$ 10,041.03		\$ 250.15	\$ -	\$ 1,209.12	<b>\$ 1,459.27</b>
<b><u>Example 2 - Graphic Arts Facility</u></b>						
Flat Emissions Fee	\$ 124.35		\$ 3.11	\$ -	\$ -	\$ 3.11
Title V Facility Fee	\$ 514.49		\$ 12.86	\$ -	\$ 84.38	\$ 97.24
Annual Operating Renewal Fee	\$ 11,134.34	\$ 17.08	\$ 261.28	28.00	\$ 1,714.02	\$ 2,020.38
	\$ 11,773.18	\$ 17.08	\$ 277.25	\$ 28.00	\$ 1,798.40	<b>\$ 2,120.73</b>
<b><u>MEDIUM TITLE V FACILITY EXAMPLES</u></b>						
<b><u>Example 3 - Steel Products Facility</u></b>						
Flat Emissions Fee	\$ 124.35		\$ 3.11	\$ -	\$ -	\$ 3.11
Title V Facility Fee	\$ 514.49		\$ 12.86	\$ -	\$ 84.38	\$ 97.24
Annual Operating Renewal Fee	\$ 27,374.80	\$ -	\$ 684.37	-	\$ 4,489.47	\$ 5,173.84
Annual Emissions Reporting	\$ 1,794.82		\$ 44.87	-	\$ -	\$ 44.87
Hot Spots	\$ 483.25	\$ -	\$ 10.41	-	\$ -	\$ 10.41
	\$ 30,291.71		\$ 755.62	\$ -	\$ 4,573.84	<b>\$ 5,329.46</b>
<b><u>Example 4 - Steel Products Facility</u></b>						
Flat Emissions Fee	\$ 124.35		\$ 3.11	\$ -	\$ -	\$ 3.11
Title V Facility Fee	\$ 514.49		\$ 12.86	\$ -	\$ 84.38	\$ 97.24
Annual Operating Renewal Fee	\$ 24,283.47	\$ 89.64	\$ 517.44	147.02	\$ 3,394.43	\$ 4,148.53
Semi-Annual Emissions Installment	\$ 43,681.79		\$ 1,092.04	-	\$ -	\$ 1,092.04
Annual Emissions Reporting	\$ 56,019.84		\$ 1,400.50	-	\$ -	\$ 1,400.50
Hot Spots	\$ 901.92		\$ 19.20	-	\$ -	\$ 19.20
	\$ 125,525.86		\$ 3,045.15	\$ 147.02	\$ 3,478.80	<b>\$ 6,760.61</b>
<b><u>LARGE TITLE V REFINERY-TYPE EXAMPLES</u></b>						
<b><u>Example 5 - Refinery</u></b>						
Flat Emissions Fee	\$ 124.35		\$ 3.11	\$ -	\$ -	\$ 3.11
Title V Facility Fee	\$ 514.49		\$ 12.86	\$ -	\$ 84.38	\$ 97.24
Annual Operating Renewal Fee	\$ 426,534.98	\$ 904.98	\$ 9,758.40	1,484.16	\$ 64,015.10	\$ 76,162.63
Semi-Annual Emissions Installment	\$ 615,574.46		\$ 15,389.36	-	\$ -	\$ 15,389.36
Annual Emissions Reporting	\$ 695,487.30		\$ 17,387.18	-	\$ -	\$ 17,387.18
Hot Spots	\$ 8,336.31		\$ 149.81	-	\$ -	\$ 149.81
	\$ 1,746,571.89		\$ 42,700.72	\$ 1,484.16	\$ 64,099.48	<b>\$ 109,189.33</b>
<b><u>Example 6 - Refinery</u></b>						
Flat Emissions Fee	\$ 124.35		\$ 3.11	\$ -	\$ -	\$ 3.11
Title V Facility Fee	\$ 514.49		\$ 12.86	\$ -	\$ 84.38	\$ 97.24
Annual Operating Renewal Fee	\$ 538,077.00	\$ 934.86	\$ 12,512.81	1,533.16	\$ 82,084.01	\$ 97,064.84
Semi-Annual Emissions Installment	\$ 985,244.89		\$ 24,631.12	-	\$ -	\$ 24,631.12
Annual Emissions Reporting	\$ 900,033.18		\$ 22,500.83	-	\$ -	\$ 22,500.83
Hot Spots	\$ -		\$ -	-	\$ -	\$ -
	\$ 2,423,993.91		\$ 59,660.73	\$ 1,533.16	\$ 82,168.39	<b>\$ 144,297.14</b>

\*New permit application fees for Title V sources will also increase by the 2.5% CPI and an additional 16% in FY 17-18. Those fee increases are not included here since it is contingent upon the number of new permit applications, alternations and/or modifications that a facility might submit in any given year.

## B. EQUITY

H&SC Section 40510.5(b) requires the SCAQMD Governing Board to find that an increased fee will result in an equitable apportionment of fees when increasing fees beyond the CPI. It is reasonable to use annual operating and permit-related fees to apportion certain costs. Such a system is reasonably related to the fee payers’

benefits from and burdens on the regulatory system. The fee including the proposed increase, results in an equitable apportionment of permit processing fees, since the fee increase for the permit processing fee is based on the estimated labor costs of performing the work. Such apportionment, based on actual costs, is equitable because each fee-payer pays most of the cost of services related to its permit. Also, the apportionment of annual operating fees based on equipment categories is proportionate to the enforcement related efforts associated with the different fee schedules which are related to equipment complexity. Thus, the fee apportionment for annual operating fees is equitable. It is necessary to increase both of the fees to assist in recovering the actual labor costs which have increased in part due to the significant increases in mandated retirement contribution rates. Annual operating fees are used to pay for some costs associated with permitting activities. This is reasonably related to the benefits and burdens related to fee payors, because the total costs (burden) are ultimately recovered, while each fee payor receives the benefit of receiving a permit and spreading costs related to permit processing over a longer time period through annual renewal operating fees.

Also the proposals are designed to more appropriately and equitably align program costs and revenues. Fee increases are supported by empirical data that indicate a current revenue shortfall in certain categories. Permitting related activities are currently experiencing a significant shortfall. By uniformly increasing fees associated with permit processing and annual renewals, the equitable apportionment of fees amongst sources will remain, and more closely recover actual costs to administer these programs. The difference between treatment of Title V sources and non-Title V sources is equitable for two reasons: First, Title V sources are generally larger businesses which impose a greater regulatory burden and are more able to absorb larger fees, and second the Clean Air Act and USEPA regulations specifically require fees on Title V sources to recover their program costs. In contrast, the Governing Board may choose to support part of the costs of the non-Title V permitting program through unrestricted revenue such as penalties. The proposed budget continues to do so for FY 2017-18.

Rule 320 – Automatic Adjustment Based on Consumer Price Index for Regulation III-Fees, was adopted by the SCAQMD Governing Board on October 29, 2010. The rule establishes that in order to continue recovering agency costs, fees must keep pace at a minimum with inflation as measured using the Consumer Price Index (CPI), unless otherwise directed by the SCAQMD Governing Board. Rule 320 provides for the automatic adjustment in fees annually commensurate with the rate of inflation and thus recovers the CPI-caused increase in the “reasonable cost” of services provided.

The proposed 16% and 4% per year fee increases over the next two FYs for permitted sources are likewise necessary to recover the reasonable regulatory costs for issuing permits and enforcement as authorized under Proposition 26. Permit fees are a “reasonable cost” to better recover staff expenditures for services that confer “a specific benefit conveyed or privilege (namely the permit to construct/operate) granted directly to the payor (owner/operator)” as authorized under Proposition 26. The fee increases are no more than necessary to cover the

reasonable costs of issuing these permits and enforcement-related work associated with permitted sources, and they are allocated fairly and reasonably based on the burdens imposed on and benefits received from the Permitted Source Program. Furthermore, permit fees and annual renewal fees are also set such that they are necessary and equitable to better recover the cost of continuing vital and mandatory programs and services as “A charge imposed for the reasonable regulatory costs to a local government for issuing licenses and permits, performing investigations, inspections and audits” and for “the administrative enforcement and adjudication thereof.” as also allowed under Proposition 26. Staff annually provides a recommendation on the rate of adjustment to the SCAQMD Governing Board based on the reasonable cost of maintaining the services required for mandatory programs. The SCAQMD Governing Board, at its discretion, may vote for a rate of adjustment that is different from the CPI. Staff’s proposed amendments for FY 2017-18 are detailed in Section II Proposed Amendments of this report.

#### **C. AUTHORITY**

The SCAQMD Governing Board obtains its authority to adopt, amend, or repeal rules and regulations from H&SC Sections 40000, 40001, 40440, 40500, 40501.1, 40502, 40506, 40510, 40510.5, 40512, 40522, 40522.5, 40523, 40702, and 44380, and Clean Air Act section 502(b)(3) [42 U.S.C. §7661(b)(3)] .

#### **D. CLARITY**

The SCAQMD Governing Board has determined that Regulation III – Fees, including Rules 301, 303, 304, 304.1, 306, 307.1, 308, 309, 311, 313, 314 and 315, as proposed to be amended, are written or displayed so that their meaning can be easily understood by the persons directly affected by them.

#### **E. CONSISTENCY**

The SCAQMD Governing Board has determined that Regulation III – Fees, including Rules 301, 303, 304, 304.1, 306, 307.1, 308, 309, 311, 313, 314 and 315 as proposed to be amended, are in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, or state or federal regulations.

#### **F. NON-DUPLICATION**

The SCAQMD Governing Board has determined that Regulation III – Fees, including Rules 301, 303, 304, 304.1, 306, 307.1, 308, 309, 311, 313, 314 and 315, as proposed to be amended, do not impose the same requirements as any existing state or federal regulation and are necessary and proper to execute the power and duties granted to, and imposed upon, the SCAQMD.

**G. REFERENCE**

The SCAQMD Governing Board, in amending these rules, references the following statutes which the SCAQMD hereby implements, interprets, or makes specific: H&SC Sections 40500, 40500.1, 40510, 40510.5, 40512, 40522, 40522.5, 40523, 41512, and 44380, and Clean Air Act section 502(b)(3) [42 U.S.C.S. 7661 (b)(3)].

**XI. PUBLIC COMMENTS AND RESPONSES**

A Preliminary Draft Package consisting of the: Preliminary Draft Staff Report, Preliminary Draft rules, Draft Socioeconomic Assessment for Automatic Consumer Price Index (CPI) Increase and Draft Socioeconomic Assessment for Proposed Amended Regulation III, was made publicly available on April 11, 2017. Staff has presented the FY 2017-18 budget and PAR III fee proposals during the following publicly held meetings:

- Budget Advisory Committee meeting (4/6/17)
- Public Consultation Meeting #1 (4/11/17)
- Public Consultation Meeting #2 (4/18/17)
- Special Meeting of Governing Board - Budget Workshop (4/21/17)

The public was invited to present comments regarding the amendment proposals at these meetings or to provide written comments to the SCAQMD regarding the CPI based fee increase by April 15, 2017, or the additional components of the proposed amendment by April 25, 2017. The earlier deadline for consideration of the CPI based fee increase was necessary because comments regarding the CPI based fee increase were due to the Governing Board by April 15, 2017.

This section incorporates the Executive Officer's (EOs) letter to the SCAQMD Governing Board regarding responses to public input prior to the April 14, 2017 deadline, and two additional comment letters, received by the April 25, 2017 deadline. The communication to the Governing Board has been marked up to show numbered comments and the associated responses. The two comment letters have been numbered by paragraph to reference staff responses which are provided after each letter. Some of the responses to the comments in the comment letters are by reference to similar comments already addressed in the EOs April 14, 2017 transmittal letter to the Governing Board.

**Comment Letter #1 Summary of Stakeholder Comments Received Through April 15, 2017, with Repones Bracketed in EO Transmittal to AQMD Governing Board**



**South Coast  
Air Quality Management District**

21865 Copley Drive, Diamond Bar, CA 91765-4178  
(909) 396-2000 • www.aqmd.gov

April 14, 2017

South Coast Air Quality Management  
District Governing Board

Budget Advisory Committee Recommendations  
and Public Comments on the Draft Fiscal Year 2017-18  
Budget and Work Program, Automatic Fee Adjustment,  
and Proposed Amended Regulation (PAR) III - Fees

This report provides recommendations and comments from the April 6, 2017 Budget Advisory Committee meeting, public comments from the April 11, 2017 Public Consultation Meeting, and comments submitted directly to SCAQMD Staff. Responses are provided as appropriate.

Rule 320 - Automatic Adjustment Based on Consumer Price Index for Regulation III Fees requires this report. This year, staff is also providing the report for the proposed fee increases above the Consumer Price Index (CPI).

**Budget Advisory Committee Recommendations/Comments**

- Consider reducing expenditures by achieving program efficiencies in combination with increasing fees.

} C1-1

SCAQMD Staff Response: Over the years, numerous steps have been taken to contain costs and improve program efficiencies through automation, office restructuring, etc. While SCAQMD's total General Fund budget has increased over the last twenty-five years, it has done so at a rate that is significantly below CPI over the same time period. Cost containment and operational efficiencies will continue to be sought out on a continuing basis.

} R1-1

- Spread the proposed fee increase over three years, instead of two.

} C1-2

SCAQMD Staff Response: The proposed fee increase is based on the amount that is required to achieve a balanced General Fund budget in FY 2017-18 and to fully comply with the finding from the U.S. EPA Title V Program Review regarding full cost recovery of Title V expenditures. The Health and Safety Code requires the fee increase to be phased in over a two year period, which results in a one-year lag in achieving a balanced budget and compliance with Title V. Phasing in the proposed fee increase over a three year period will result in a two-year lag in balancing the budget, delay compliance with Title V, reduce the Unreserved Fund Balance to below 20% of revenues, and further the risk of potential

} R1-2

*Cleaning the air that we breathe...*<sup>TM</sup>

negative financial impacts from reductions in federal grant revenue, pension cost increases, and continued reliance on penalties and settlement revenues that vary annually. }

- In light of the current backlog and permit processing turnaround times, one Budget Advisory Committee member does not support the fee increase. } C1-3

SCAQMD Staff Response: So far, the Permit Application Backlog Reduction Plan has exceeded the established goals in a shorter amount of time than originally projected. There has been renewed effort in hiring staff and in automating the application process so that turnaround times will be reduced in the near future as new staff are fully trained and the automation projects are completed. The proposed fee increase supports these ongoing efforts to ensure permit applications are processed in a timely manner. }

R1-3

- Provide the Budget Advisory Committee with periodic updates throughout the year as needed on issues with budgetary impact (e.g., federal funding cuts, retirement cost increases). } C1-4

SCAQMD Staff Response: Staff will provide the Committee with updates throughout the year as necessary, either via email or during scheduled meetings. }

R1-4

### **Public Questions/Comments**

One member of the public and one Board Consultant attended the Public Consultation Meeting held on April 11, 2017. One written comment was submitted directly to SCAQMD staff (attached).

- Is the increased work on Title V permits that EPA is requiring as part of their September 2016 Program Evaluation included in the FY 2017-18 proposed budget and associated fee increase? } C1-5

SCAQMD Staff Response: The proposed fee increase for Title V facilities is necessary to recover current Title V expenditures from Title V facilities and does not include any additional level of effort that may be required by the U.S. EPA in the future. }

R1-5

- A member of the public commented that in consideration of how long it currently takes to get a permit processed, they would expect to get something, such as an increased level of service, for the additional fees. } C1-6

SCAQMD Staff Response: The proposed fee increase supports the ongoing effort to streamline, automate, and reduce the processing time for permit applications. As evidence of this ongoing effort, the permit backlog has been reduced to under 5,000 applications from over 7,300 since June 2016. It is anticipated that once the goals of the Permit Application Backlog Reduction Plan have been achieved, resources will be deployed in a manner that results in a focus on continuing to improve average permit processing times. }

R1-6

There is one additional Public Consultation meeting scheduled for Tuesday, April 18, 2017. Any public comments received at that meeting will be forwarded to you for your consideration.

I wish to thank both the Budget Advisory Committee and the public for their valuable and continued input as part of the annual budget process. The recommendations and comments will be further evaluated to ensure the efficient and effective operation of the District.

Respectfully,



Wayne Nasri  
Executive Officer

WN:MBO:DRP

Attachment

cc: Budget Advisory Committee

**Attachment to Comment (and Response) Letter #1**

3.28.2017

I PRAY OUR PRESIDENT, DONALD J. TRUMP, PUTS THIS ENITY OUT OF  
BUSINESS.



**Comment Letter #2 – Southern California Air Quality Alliance**

April 25, 2017

SENT VIA E-MAIL

Michael O'Kelly  
Chief Administrative Officer  
South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765

Re: SCAQMD Proposed 2017-18 Budget and Fee Increases

Dear Mr. O'Kelly:

As a representative of the Southern California Air Quality Alliance, have been an active participant on the SCAQMD Budget Advisory Committee for many years. I have attended the Budget Advisory Committee meetings held in anticipation of the adoption of the FY2017-18 SCAQMD Budget. I also attended and presented testimony at the SCAQMD Governing Board Budget Workshop on April 21, 2017.

2-1

We appreciate the work that the SCAQMD staff has done to address concerns that I have been expressing for years regarding permit processing. We understand that there will be times when CPI increases to SCAQMD fees will not be sufficient to allow SCAQMD to cover its costs associated with programs associated with stationary source regulatory activities. Finally, we appreciate the SCAQMD Governing Board's sensitivity over the years to the impact large fee increases can have on the people doing business in the SCAQMD.

2-2

I have, in the past stated that smaller fee increases spread over time have less impact than large fee increases over short periods of time. This is the reason that I and others are requesting that the proposed Title V fee increases be spread over three years rather than two. Under the current staff proposal, Title V facility operators will see their fees increase by more than 40% over two years (FY2017-18 has an increase of 16% + 2.5% or 18.5% compounded by another 18.5% increase for FY2018-19, which equals an overall 40.4% increase).

2-3

Thank you for your consideration of this request.

Very truly yours

Curtis L. Coleman, Esq.  
Executive Director  
Southern California Air Quality Alliance

6601 Center Drive West  
Suite 500  
Los Angeles, CA 90045  
Attn: Curtis L. Coleman  
(310) 348-8186 Ph  
(310) 670-1229 Fax  
colemanlaw@earthlink.net



**Response to Comment Letter #2**

- 2-1 Staff thanks you for your interest and participation in previous Budget Advisory Committee (BAC) meetings. Also we appreciate your attendance at the April 21, 2017 Governing Board Budget Workshop, including the testimony you provided at that meeting.
- 2-2 In response to requests from stakeholders, staff continues to work diligently on reducing the permit backlog and is currently ahead of the anticipated schedule as presented to the Governing Board.
- 2-3 See R1-2 in this section for staff response.

**Comment Letter #3 – California Council for Environmental and Economic Balance****California Council for Environmental and Economic Balance**

101 Mission Street, Suite 1440, San Francisco, California 94105  
415-512-7890 phone, 415-512-7897 fax, [www.cceeb.org](http://www.cceeb.org)

April 25, 2017

Donna Peterson  
Financial Services Manager  
SCAQMD  
21865 Copley Drive Diamond Bar, CA 91765

RE: Proposed Amended Regulation III – Fees

Dear Donna,

On behalf of the members of the California Council for Environmental and Economic Balance (CCEEB), we provide comments on the Proposed Amended Regulation III – Fees. CCEEB is a coalition of business, labor, and public leaders that advances strategies for a sound economy and a healthy environment. We have many members that operate facilities in the air basin. Many of these facilities are so-called Title V Facilities.

3-1

I am pleased to be an active member of the Budget Advisory Committee and participated at its last meeting on April 6, 2017. The information presented at this committee meeting is always done in a very professional manner. CCEEB appreciates the opportunity to remain active with this committee.

3-2

On April 6, industry members participating, myself included, were surprised to learn that staff was proposing a significant increase to the fees associated with the District's Title V Program. The proposed increase would be CPI plus 16% over the next two years. We were told that the increase was required as a result of an EPA audit that found the District was collecting insufficient funds to implement the program successfully.

3-3

While CCEEB is disappointed in the amount of the increase, we have two specific requests:

First, we believe it is important that staff show the full impact of this increase on all facilities: small, medium and large. For example, our estimates show that for a large facility, the increase could amount to over \$100,000 each year. These examples should be a part of the presentation to the Board when it considers adoption of the fee schedule in June.

} 3-4

Our second request is to provide facilities with more time to adjust to the higher rates by spreading the increase over three years, rather than two.

} 3-5

We believe that these are modest requests that will go a long way to address our member's concerns.

} 3-6

Thank you.



William J. Quinn  
Chief Operating Officer

cc: Mr. Wayne Natri  
Mr. Michael O'Kelly  
Mr. Jerry Secundy

**Response to Comment Letter #3**

- 3-1 Staff thanks you for your comment letter regarding Title V facilities.
- 3-2 Thank you for serving as a member as the Budget Advisory Committee and for your positive comments regarding staffs presentation of budget and fee issues.
- 3-3 Correct. Refer to R1-2 in this section for staff response.
- 3-4 Staff has analyzed the impact of the Title V fee increase (see this staff report for details) on larger sources and anticipates total fees under the current proposals for larger sources, such as for example refineries, will typically increase by approximately 5% to 6% in aggregate, since not all fees at a Title V source will increase by 16%.
- 3-5 Refer to R1-2 in this section for staff response.
- 3-6 Please see response to 3-4 and 3-5.

**APPENDIX A – RULE 320**

(Adopted October 29, 2010)

**RULE 320. AUTOMATIC ADJUSTMENT BASED ON CONSUMER PRICE INDEX FOR REGULATION III FEES****(a) Purpose**

The purpose of this rule is to automatically adjust most fees established in Regulation III by the California Consumer Price Index each year, unless a rule adopted for a specific year provides otherwise for some or all of those fees.

**(b) Applicability**

Effective July 1 of each calendar year after October 29, 2010, each fee set forth in Regulation III as of October 29, 2010 shall be automatically adjusted by the change in the California Consumer Price Index for the preceding calendar year, as defined in Health and Safety Code §40500.1(a).

**(c) Exceptions**

- (1) The provisions of subdivision (b) shall not apply for any fiscal year for which a rule is adopted for a specific fee or fees or for all fees that provides for a different adjustment or no adjustment. In such a case, subdivision (b) shall again apply for the subsequent years.
- (2) The provisions of subdivision (b) shall not apply to any fee which is charged for a dishonored check, which shall be as set forth by statute, nor to Rule 317, which shall instead be automatically adjusted as stated in Rule 317(d)(2).

- (d) This rule shall become inoperative if the voters do not enact Proposition 26 on the November 2, 2010 ballot.

## APPENDIX B – FEE RATE INCREASES FOR PROVISIONS IN REGULATION III

Column “1 CPI only”	Current FY 2016-17 fee increased by CPI <u>only</u> for FY 2017-18
Column “2 CPI + Non-TV	Non-Title V sources only: the current FY 2016-17 fee increased by CPI and an additional 4% for FY 2017-18 and a further additional 4% for FY 2018-19.
Column “3 CPI + TV”	Title V sources only: the current FY 2016-17 fee increased by CPI and an additional 16% for FY 2017-18 and a further additional 16% for FY 2018-19.

Rule	Referencing	1 CPI only	2 (CPI + Non-TV)	3 (CPI + TV)
301(c)(1)(J)	Standard Streamlined Permits		✓	✓
301(c)(3)(A)	Change of Operating Condition, Alteration/Modification/Addition		✓	✓
301(c)(3)(B)(i)	Change of Operating Condition, Alteration/Modification/Addition		✓	✓
301(c)(3)(B)(ii)	Change of Operating Condition, Alteration/Modification/Addition		✓	✓
301(c)(3)(C)	Change of Operating Condition, Alteration/Modification/Addition		✓	✓
301(d)(2)	Annual Operating Fees		✓	✓
301(d)(3)(A)	Credit for Solar Energy Equipment	✓		
301(e)(4)	Flat Annual Operating Emission Fee	✓		
301(e)(16)	Reporting GHG Emissions and Paying Fees	✓		
301(f)	Certified Permit Copies and Reissued Permits		✓	✓

Rule	Referencing	1 CPI only	2 (CPI + Non-TV)	3 (CPI + TV)
301(g)	Reinstating Expired Applications or Permits; Surcharge		✓	✓
301(j)(1)(A)	CEQA Document Preparation	✓		
301(j)(1)(B)	CEQA Document Assistance	✓		
301(j)(4)	Payment for Public Notice		✓	✓
301(j)(5)(B)(i)	Modification of an Existing Certified CEMS, FSMS, or ACEMS	✓		
301(j)(5)(B)(iv)	Modification of an Existing Certified CEMS, FSMS, or ACEMS	✓		
301(j)(5)(C)	Modification of CEMS, FSMS, or ACEMS Monitored Equipment	✓		
301(j)(5)(D)	Periodic Assessment of an Existing RECLAIM CEMS/FSMS/ACEMS	✓		
301(j)(5)(E)	CEMS, FSMS, or ACEMS Change of Ownership	✓		
301(j)(6)(A)	Certification of Barbeque Charcoal Lighter Fluid	✓		
301(j)(6)(B)	Repackaging of Certified Barbeque Charcoal Igniter Products	✓		
301(j)(7)	Fees for Inter-basin, Inter-District, or Interpollutant Transfers of ERCs		✓	✓
301(j)(8)	Fees for Grid Search to Identify Hazardous Air Pollutant Emitting Facilities	✓		

Rule	Referencing	1 CPI only	2 (CPI + Non-TV)	3 (CPI + TV)
301(l)(4)(A)	Facility Permit Fees (RECLAIM)		✓	✓
301(l)(5)	Facility Permit Amendment (RECLAIM)		✓	✓
301(l)(9)	Transaction Registration Fee (RECLAIM)		✓	✓
301(l)(11)	Certified Permits Copies (RECLAIM)	✓		
301(l)(12)	Reissued Permits (RECLAIM)	✓		
301(l)(13)	Breakdown Emission Report Evaluation Fee (RECLAIM)		✓	✓
301(l)(15)	Mitigation of Non-Tradeable Allocation Credits (RECLAIM)		✓	✓
301(l)(16)	Evaluation Fee to Increase an Annual Allocation (RECLAIM)		✓	✓
301(m)(3)(A)	Permit Processing Fees for Existing Facilities with Existing District Permits Applying for an Initial Title V Permit (Title V)			✓
301(m)(3)(B)	Permit Processing Fees for Existing Facilities with Existing District Permits Applying for an Final Title V Permit (Title V)			✓
301(m)(6)	Administrative Permit Revision Fee (Title V)			✓
301(m)(7)	Permit Revision Fee (Title V)			✓
301(m)(8)	Renewal Fees (Title V)			✓



Rule	Referencing	1 CPI only	2 (CPI + Non-TV)	3 (CPI + TV)
301(m)(10)	Public Hearing Fees (Title V)			✓
301(n)(5)	Fee for Change of Operator (Facility Permit)		✓	✓
301(n)(7)	Certified Permit Copies (Facility Permit)	✓		
301(n)(8)	Reissued Permits (Facility Permit)	✓		
301(q)(1)	NESHAP Evaluation Fee	✓		
301(r)	Fees for Certification of Clean Air Solvents	✓		
301(s)	Fees for Certification of Consumer Cleaning Products Used at Institutional and Commercial Facilities	✓		
301(t)(4)	Duplicated of Facility Registrations	✓		
301(u)(5)	Reissued Facility Registrations	✓		
301(u)(1)	Initial Filing Fee (Rule 222)	✓		
301(u)(2)	Change of Operator/Location (Rule 222)	✓		
301(u)(3)	Annual Renewal Fee (Rule 222)	✓		
301(v)(3)	CEMS, FSMS, and ACEMS Fee (Expedited Processing)	✓		
301(v)(4)	Air Dispersion Modeling, HRA, Source Test & Report Fees (Expedited Processing)	✓		

Rule	Referencing	1 CPI only	2 (CPI + Non-TV)	3 (CPI + TV)
301(v)(5)	ERC/STC Application Fees (Expedited Processing)	✓		
301(x)	Rule 1149 and Rule 1166 Notification Fees	✓		
301(y)(1)	Initial Certification Fee (Rules 1111,1121 and 1146.2)	✓		
301(y)(2)	Additional Fee for Modification or Extension of Families to Include a New Model(s) (Rules 1111,1121 and 1146.2)	✓		
301(z)(1)	Reverification and Performance Testing (Rule 461 No Show Fee)	✓		
301(z)(2)	Pre-Backfill Inspection (Rule 461 No Show Fee)	✓		
301 Table (Schedules A – H)	Summary Permit Fee Rates – Permit Processing, Change of Conditions, Alteration/Modification		✓	✓
301 Table (Schedule I)	Summary of ERC Processing Rates		✓	✓
301 Table	Summary of Permit Fee Rates Change of Operator		✓	✓
301 Table IIA	Special Processing Fees – AQ Analysis/HRA	✓		
301 Table IIB	Fee for Public Notice Publication		✓	✓
301 Table IIC	CEMS, FSMS And ACEMS Fee Schedule	✓		
301 Table III	Emissions Fees	✓		

Rule	Referencing	1 CPI only	2 (CPI + Non-TV)	3 (CPI + TV)
301 Table IV	Toxic Air Contaminants and Ozone Depleters	✓		
301 Table V	Annual Clean Fuels Fees	✓		
301 Table VI	Demolition, Asbestos and Lead Notification Fees	✓		
301 Table VII	Summary of RECLAIM and Title V Fees	✓		
303	Hearing Board Fees	✓		
304	Equipment, Materials, and Ambient Air Analyses	✓		
304.1	Hearing Board Fees	✓		
306(c)	Plan Filing Fee		✓	✓
306(d)	Plan Evaluation Fee		✓	✓
306(e)	Duplicate Plan Fee		✓	✓
306(f)	Inspection Fee (Plans)		✓	✓
306(g)	Change of Condition Fee (Plans)		✓	✓
306(i)(1)	Payment of Fees - Plan Filing or Submittal Fee		✓	✓
306(l)	Plan Application Cancellation Fee		✓	✓
306(m)	Protocol/Report Evaluation Fees		✓	✓

Rule	Referencing	1 CPI only	2 (CPI + Non-TV)	3 (CPI + TV)
306(q)	Optional Expedited Protocol/Report Evaluation Processing Fee		✓	✓
306(q)	Optional Expedited Protocol/Report Evaluation Processing Fee		✓	✓
306(r)(1)	Regulation XXVII – Fees for Rule 2701		✓	✓
306(r)(2)	Regulation XXVII – Fees for Rule 2702		✓	✓
307.1	Alternative Fees For Air Toxics Emissions Inventory (no change in “State Fee” column fees)	✓		
308	On – Road Motor Vehicle Mitigation Options	✓		
309	Fees For Regulation XVI And Regulation XXV	✓		
311	Air Quality Investment Program (AQIP) Fees	✓		
313	Authority to Adjust Fees And Due Dates	✓		
314	Fees For Architectural Coatings	✓		
315	Fees For Training Classes And License Renewals	✓		

**APPENDIX C 1 – COMPARISON OF FY 2017-2018 WORK PROGRAM TO COST ALLOCATION SCHEDULE**

	(a)	(b)	(c)	(d)	(e)
<b>Program Category</b>	<b>Work Program</b>	<b>Adjusted Work Program without Overhead</b>	<b>Allocatable Office Overhead (Allocated)</b>	<b>Allocatable SCAQMD Overhead (Allocated)</b>	<b>Total Work Program with Overhead</b>
Advance Clean Air Technology	\$8,661,899	\$8,661,899	\$239,071	\$1,948,398	\$10,849,368
Ensure Compliance	42,802,491	41,588,803	3,625,152	11,020,340	56,234,296
Customer Service and Business Assistance	13,437,515	7,077,433	939,664	1,781,411	9,798,508
Develop Programs to Achieve Clean Air	10,184,322	9,073,810	385,261	2,081,094	11,540,165
Develop Rules to Achieve Clean Air	7,354,657	7,226,762	351,833	1,787,236	9,365,831
Monitoring Air Quality	11,398,567	10,828,053	300,374	2,785,741	13,914,168
Operational Support	26,747,503	2,540,112	1,765,562	815,227	5,120,900
Timely Review of Permits	24,151,356	24,151,356	1,001,105	6,144,308	31,296,769
Policy Support	5,140,597	985,141	432,603	341,156	1,758,900
	<u>\$149,878,906</u>	<u>\$112,133,369</u>	<u>\$9,040,624</u>	<u>\$28,704,912</u>	<u>\$149,878,906</u>

(a) The Work Program is developed from individual Work Plans from each SCAQMD Office and includes a prorated share of the District General budget. (District General expenditures are overhead costs and include utilities, building maintenance, and insurance). The Work Program is described in the Work Program Overview section of the Draft Budget and Work Program.

(b) This column displays the Work Program without the Allocatable Office and Allocatable SCAQMD Overheads.

(c) Allocatable Office Overhead expenditures are for administrative activities that serve an office solely. These costs are allocated over the office's work program lines based on the percent of FTEs assigned to a work program line compared to the total office FTEs excluding allocatable office overhead.

(d) Allocatable SCAQMD Overhead expenditures are for administrative activities that serve all SCAQMD programs. These costs include Human Resources, Finance/Payroll, Information Management, Contracts Administration, Governing Board and Committee support, etc. Allocatable SCAQMD costs are allocated over all work program lines based on the percent of FTEs assigned to a work program line compared to the total agency FTEs excluding allocatable overhead.

(e) This column represents the redistribution of the general SCAQMD support expenditures. These fully-burdened expenditures then become the starting point for the Cost Allocation Schedule found on the next page.

**APPENDIX C 2 - FY 2017-18 PROPOSED BUDGET - COST ALLOCATION SUMMARY****EXPENDITURES**

Description	MOBILE SOURCES	CLEAN FUELS	CARB SUBVENTION/ STATE REVENUE	ANNUAL OPERATING	EMISSIONS FEES	PERMIT PROCESSING FEES	FEDERAL GRANTS/OTHER FEDERAL REVENUE	SOURCE TEST/SAMPLE ANALYSIS	HEARING BOARD	AIR TOXICS AB 2588	TRANSP PROGRAMS	OTHER REVENUE	AREA SOURCES	PERP	Total
Advance Clean Air Technology	\$4,694,111	\$4,824,358	\$0	\$0	\$0	\$0	\$189,110	\$0	\$0	\$0	\$0	\$1,141,789	\$0	\$0	\$10,849,368
Compliance	\$4,495,844	\$0	\$1,946,961	\$27,980,087	\$7,774,117	\$1,282,086	\$2,635,401	\$2,554,721	\$1,493,876	\$4,129,615	\$0	\$83,673	\$811,999	\$1,045,914	\$56,234,296
Customer Service	\$3,039,555	\$0	\$86,458	\$3,003,857	\$1,907,217	\$1,262,993	\$139,560	\$116,866	\$0	\$2,326	\$239,677	\$0	\$0	\$0	\$9,798,508
Develop Air Programs	\$4,818,700	\$212,483	\$93,214	\$970,262	\$3,145,528	\$391,990	\$162,742	\$0	\$0	\$0	\$1,077,060	\$668,187	\$0	\$0	\$11,540,165
Develop Rules	\$1,840,061	\$63,745	\$101,071	\$1,307,972	\$5,658,807	\$50,399	\$97,382	\$0	\$0	\$0	\$0	\$0	\$246,394	\$0	\$9,365,831
Monitoring Air Quality	\$7,209,787	\$0	\$628	\$830,908	\$749,619	\$0	\$3,525,352	\$0	\$0	\$0	\$0	\$1,172,908	\$424,967	\$0	\$13,914,168
Operational Support	\$166,485	\$0	\$30,108	\$1,752,884	\$1,178,833	\$1,541,769	\$0	\$0	\$237,523	\$0	\$111,335	\$18,268	\$83,695	\$0	\$5,120,900
Permit	\$0	\$0	\$124,669	\$1,839,508	\$877,728	\$28,224,909	\$99,277	\$130,677	\$0	\$0	\$0	\$0	\$0	\$0	\$31,296,769
Policy Support	\$634,681	\$21,248	\$0	\$793,222	\$99,934	\$10,459	\$0	\$0	\$0	\$0	\$0	\$199,355	\$0	\$0	\$1,758,900
<b>TOTAL EXPENDITURES</b>	\$26,899,224	\$5,121,835	\$2,383,108	\$38,478,700	\$21,391,784	\$32,764,606	\$6,848,824	\$2,802,264	\$1,731,399	\$4,131,940	\$1,428,072	\$3,284,180	\$1,567,055	\$1,045,914	\$149,878,906

**REVENUES**

Description	MOBILE SOURCES	CLEAN FUELS	CARB SUBVENTION/ STATE REVENUE	ANNUAL OPERATING	EMISSIONS FEES	PERMIT PROCESSING FEES	FEDERAL GRANTS/OTHER FEDERAL REVENUE	SOURCE TEST/SAMPLE ANALYSIS	HEARING BOARD	AIR TOXICS AB 2588	TRANSP PROGRAMS	OTHER REVENUE	AREA SOURCES	PERP	Total
FY 17-18 Projection	\$22,933,630	\$5,287,570	\$3,945,090	\$49,236,376	\$19,055,897	\$18,700,534	\$6,452,560	\$756,000	\$300,000	\$2,488,380	\$840,352	\$8,439,310	\$2,100,000	\$1,200,000	\$141,735,699
2.5% Rule 320 CPI Fee Increase	\$0	\$0	\$0	\$1,239,619	\$475,135	\$357,221	\$0	\$18,900	\$7,500	\$0	\$21,009	\$0	\$52,500	\$0	\$2,171,884
16% Title V Fee Increase	\$0	\$0	\$0	\$1,245,285	\$0	\$287,488	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,532,774
Sub-Total Revenue	\$22,933,630	\$5,287,570	\$3,945,090	\$51,721,280	\$19,531,032	\$19,345,243	\$6,452,560	\$774,900	\$307,500	\$2,488,380	\$861,361	\$8,439,310	\$2,152,500	\$1,200,000	\$145,440,356
ADJUSTED SURPLUS/(DEFICIT)	(\$3,965,594)	\$165,735	\$1,561,982	\$13,242,580	(\$1,860,752)	(\$13,419,363)	(\$396,264)	(\$2,027,364)	(\$1,423,899)	(\$1,643,560)	(\$566,711)	\$5,155,130	\$585,445	\$154,086	(\$4,438,549)
TRANSFER EXCESS REVENUES TO SUPPLEMENT SHORTFALLS															
(1) Annual Operating to Permit Overhead				(\$6,358,199)		\$6,358,199									\$0
(2) Annual Operating to Source Testing				(\$2,027,364)				\$2,027,364							\$0
(3) Annual Operating to Hearing Board				(\$1,423,899)					\$1,423,899						\$0
(4) CARB to Mobile Source & Transportation	\$1,366,675		(\$1,561,982)								\$195,307				\$0
(5) Other to Mobile Source & Transportation	\$2,593,163						\$0				\$370,592	(\$2,963,755)			\$0
(6) Annual Operating to Emissions & Permit				(\$3,433,118)	\$716,010	\$2,717,108									\$0
ADJUSTED SURPLUS/(DEFICIT)	(\$5,756)	\$165,735	\$0	\$0	(\$1,144,742)	(\$4,344,056)	(\$396,264)	\$0	\$0	(\$1,643,560)	(\$812)	\$2,191,375	\$585,445	\$154,086	(\$4,438,549)
Fee Increase % to Cover Costs						15%									
REVENUE FROM 4% FEE INCREASE ABOVE CPI *				\$1,772,136		\$297,816									\$2,069,952
<b>TOTAL REVENUE</b>	\$22,933,630	\$5,287,570	\$3,945,090	\$53,493,416	\$19,531,032	\$19,643,059	\$6,452,560	\$774,900	\$307,500	\$2,488,380	\$861,361	\$8,439,310	\$2,152,500	\$1,200,000	\$147,510,308
<b>ADJUSTED SURPLUS/(DEFICIT)</b>	(\$5,756)	\$165,735	\$0	\$1,772,136	(\$1,144,742)	(\$4,046,240)	(\$396,264)	\$0	\$0	(\$1,643,560)	(\$812)	\$2,191,375	\$585,445	\$154,086	(\$2,368,598)

## APPENDIX C 3- FY 2017-18 PROPOSED BUDGET – EXPENDITURES BY REVENUE CATEGORY

WP Code	Program Category	Project Description	Activities/Outputs	MOBILE SOURCES IX	CLEAN FUELS VIII	CARB	ANNUAL OPERATING IV	EMISSIONS FEES II	PERMIT TEST/PROCESSING FEES III	FEDERAL	SOURCE TEST/SAMPLE ANALYSIS VI	HEARING BOARD VII	AIR TOXICS AB	TRANSP PROGRAMS XI	OTHER REVENUE XVIII	AREA SOURCES XVIII	PERP XIX	Total
						SUBVENTION/ STATE REVENUE XV				GRANTS/OTHER FEDERAL REVENUE V			2588 X					
04457	Advance Clean Air Technology	Mobile Source/Moyer Adm	Carl Moyer: Contract/Fin Admin	\$216,308	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$216,308
04003	Advance Clean Air Technology	AB2766/MSRC	MSRC Program Administration	\$74,223	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$74,223
04130	Advance Clean Air Technology	Clean Fuels/Contract Admin	Clean Fuels Contract Admin/Monitor	\$0	\$31,810	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$31,810
04542	Advance Clean Air Technology	Prop 1B:Goods Movement	Contracts/Finance Admin	\$106,034	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$106,034
04544	Advance Clean Air Technology	Prop 1B:Low Emiss Sch Bus	Grants/Finance Admin	\$10,603	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,603
08001	Advance Clean Air Technology	AB2766/Mob Src/Legal Advice	AB2766 Leg Adv: Trans/Mob Source	\$14,321	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,321
08003	Advance Clean Air Technology	AB2766/MSRC	Legal Advice: MSRC Prog Admin	\$42,962	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$42,962
08131	Advance Clean Air Technology	Clean Fuels/Legal Advice	Legal Advice: Clean Fuels	\$0	\$14,321	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,321
08457	Advance Clean Air Technology	Mob Src/C Moyer/Leg Advice	Moyer/Implem/Program Dev	\$28,642	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$28,642
16457	Advance Clean Air Technology	MS/Carl Moyer Admin	C Moyer/Contractor Compliance	\$25,293	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$25,293
16542	Advance Clean Air Technology	Prop 1B:Goods Movement	Prop 1B: Goods Movement	\$25,293	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$25,293
26738	Advance Clean Air Technology	Targeted Air Shed EPA	Targeted Air Shed Admin/Impl	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$55,999	\$0	\$0	\$55,999
44003	Advance Clean Air Technology	AB2766/MSRC	Mob Src Review Comm Prog Admin	\$106,242	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$106,242
44004	Advance Clean Air Technology	AB2766/MSRC/Contract Admin	AB2766 Admin Discretionary Prog	\$637,450	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$637,450
44012	Advance Clean Air Technology	AQMP/Control Tech Assessment	Tech Supp: Quantify Cost Effect	\$0	\$21,248	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$21,248
44039	Advance Clean Air Technology	Admin/Office Mgt/Tech Adv	Admin Support/Coordination	\$0	\$163,612	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$163,612
44048	Advance Clean Air Technology	Admin/Prog Mgmt/Tech Advance	Overall TA Program Mgmt/Coord	\$0	\$329,349	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$329,349
44066	Advance Clean Air Technology	AQIP Marine SCR DPF	AQIP Marine SCR DPF/Admin/Impl	\$31,873	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$31,873
44095	Advance Clean Air Technology	CA Natural Gas Veh Partnership	CA Natural Gas Veh Partnership	\$0	\$10,624	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,624
44130	Advance Clean Air Technology	Clean Fuels/Contract Admin	Admin/Project Supp for TA Cont	\$0	\$722,444	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$722,444
44132	Advance Clean Air Technology	Clean Fuels/Mobile Sources	Dev/Impl Mobile Src Proj/Demo	\$0	\$2,559,900	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,559,900
44134	Advance Clean Air Technology	Clean Fuels/Stationary Combust	Dev/Demo Clean Combustion Tech	\$0	\$106,242	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$106,242
44135	Advance Clean Air Technology	Clean Fuels/Stationary Energy	Dev/Demo Alt Clean Energy	\$0	\$116,866	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$116,866
44136	Advance Clean Air Technology	Clean Fuels/Tech Transfer	Disseminate Low Emiss CF Tech	\$0	\$265,604	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$265,604
44187	Advance Clean Air Technology	DERA Sch Bus Repl	DERA Sch Bus Repl Admin/Impl	\$0	\$0	\$0	\$0	\$0	\$0	\$6,375	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,375
44188	Advance Clean Air Technology	DERA FY 13 Veh Repl	DERA Vehicle Repl Admin/Impl	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$42,497	\$0	\$0	\$42,497
44190	Advance Clean Air Technology	Diesel Projects EPA	Diesel Projects EPA/Admin/Impl	\$0	\$0	\$0	\$0	\$0	\$0	\$23,373	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$23,373
44203	Advance Clean Air Technology	EFMP Program Support		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$252,855	\$0	\$0	\$252,855
44356	Advance Clean Air Technology	GGRF ZEDT Demo	GGRF ZEDT Demo Admin	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$233,732	\$0	\$0	\$233,732
44361	Advance Clean Air Technology	HD Trucks DOE ARRA	DOE HD Trucks Admin (ARRA)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$424,967	\$0	\$0	\$424,967
44453	Advance Clean Air Technology	Mob Src: Emiss Inven Method	Rvw CARB/US EPA emissions inven methodology	\$165,377	\$152,988	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$318,365
44457	Advance Clean Air Technology	Mob Src/C Moyer Adm/Outreach	Carl Moyer: Impl/Admin Grant	\$2,444,190	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,444,190
44459	Advance Clean Air Technology	Mob Src/C Moyer/Impl/Prd Dev	Moyer/Implem/Program Dev	\$594,954	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$594,954
44460	Advance Clean Air Technology	VIP Admin	VIP Admin/Outreach/Impl	\$169,987	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$169,987
44497	Advance Clean Air Technology	Plug-in Hybrid EV DOE ARRA	DOE Plug-in Hybrid EV Admin (ARRA)	\$0	\$0	\$0	\$0	\$0	\$0	\$159,363	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$159,363
44533	Advance Clean Air Technology	POLB AMECS Demo	POLB AMECS Demo Admin/Impl	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$99,867	\$0	\$0	\$99,867
44677	Advance Clean Air Technology	School Bus/Lower Emission Prog	School Bus Program Oversight	\$0	\$148,738	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$148,738
44738	Advance Clean Air Technology	Targeted Air Shed EPA	Targeted Air Shed Admin/Impl	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$31,873	\$0	\$0	\$31,873
44740	Advance Clean Air Technology	Tech Adv/Commercialization	Assess CFS/Adv Tech Potential	\$0	\$53,121	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$53,121
44741	Advance Clean Air Technology	Tech Adv/Non-Combustion	Dev/Demo Non-Combustion Tech	\$0	\$21,248	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$21,248
44816	Advance Clean Air Technology	Transportation Research	Transport Research/Adv Systems	\$0	\$106,242	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$106,242
Sub-total Advance Clean Air Technology				\$4,694,111	\$4,824,358	\$0	\$0	\$0	\$0	\$189,110	\$0	\$0	\$0	\$0	\$1,141,789	\$0	\$0	\$10,849,368
04002	Customer Service and Business Assistance	AB2766/Mobile Source	Prog Admin: Monitor/Dist/Audit	\$21,207	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$21,207
04170	Customer Service and Business Assistance	Billing Services	Answer/Resp/Resolv Prob & Inq	\$0	\$0	\$0	\$1,369,629	\$171,204	\$171,204	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,712,037
04260	Customer Service and Business Assistance	Fee Review	Cmte Mtg/Fee-Related Complaint	\$0	\$0	\$1,272	\$1,909	\$14,845	\$3,181	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$21,207
04355	Customer Service and Business Assistance	Grants Management	Grant Anlysl/Eval/Negot/Acc/Rpt	\$0	\$0	\$0	\$186,619	\$0	\$0	\$25,448	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$212,067
04631	Customer Service and Business Assistance	Cash Mgmt/Refunds	Research/Doc/Prep/Proc Refunds	\$0	\$0	\$0	\$12,724	\$0	\$44,534	\$0	\$0	\$0	\$0	\$6,362	\$0	\$0	\$56,620	
08404	Customer Service and Business Assistance	Legal Rep/Legislation	Draft Legis/SCAQMD Position/Mtgs	\$21,481	\$0	\$0	\$0	\$50,123	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$71,604
08681	Customer Service and Business Assistance	Small Business/Legal Advice	Legal Advice: SB/Fee Review	\$0	\$0	\$0	\$0	\$7,160	\$7,160	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,321
16720	Customer Service and Business Assistance	Subscription Services	Rule & Gov Board Materials	\$0	\$0	\$0	\$429,982	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$429,982
26007	Customer Service and Business Assistance	AB2766/MSRC	AB2766 Prov Tech Asst to Cities	\$273,273	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$273,273
26216	Customer Service and Business Assistance	AER Public Assistance	AER Design/Impl/Monitor Emiss	\$0	\$0	\$0	\$0	\$447,989	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$447,989
26833	Customer Service and Business Assistance	Rule 2202 ETC Training	Rule 2202 ETC Training	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$233,315	\$0	\$0	\$233,315	
27481	Customer Service and Business Assistance	New System Development	Dev sys in supp of Dist-wide	\$0	\$0	\$0	\$0	\$0	\$251,374	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$251,374
35126	Customer Service and Business Assistance	Clean Air Connections	Coord of region-wide community group	\$179,074	\$0	\$0	\$0	\$53,490	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$232,564
35205	Customer Service and Business Assistance	Environmental Education	Curriculum Dev/Project Coord	\$29,070	\$0	\$3,488	\$0	\$25,582	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$58,141
35240	Customer Service and Business Assistance	Environmental Justice	Impl Board's EJ Prgms/Policies	\$0	\$0	\$0	\$162,795	\$302,333	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$465,128
35260	Customer Service and Business Assistance	Fee Review	Cmte Mtg/Fee-Related Complaint	\$0	\$0	\$5,814	\$46,513	\$46,513	\$17,442	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$116,282
35381	Customer Service and Business Assistance	Interagency Liaison	Interact Gov Agns/Promote SCAQMD	\$0	\$0	\$1,047	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,047
35390	Customer Service and Business Assistance	Outreach/Geographic Deployment	Dev/Impl Local Govt Outreach	\$1,730,465	\$0	\$0	\$0	\$516,892	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,247,357
35491	Customer Service and Business Assistance	Chambers/Business Meetings	Chambers/Business Meetings	\$0	\$0	\$0	\$139,538	\$93,026	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$232,564
35492	Customer Service and Business Assistance	Public Education/Public Events	Pub Events/Conf/Rideshare Fair	\$494,774	\$0	\$25,703	\$0	\$96,385	\$0	\$25,703	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$642,564
35514	Customer Service and Business Assistance	Permit: Expired Permit Program	Assist w/Permit Reinstatement	\$0	\$0	\$0	\$69,769	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$69,769
35555	Customer Service and Business Assistance	Public Information Center	Inform public of unhealthy air	\$248,374	\$0	\$0	\$0	\$41,933	\$0	\$32,256	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$322,564
35679	Customer Service and Business Assistance	Small Business Assistance	Small Business/Financial Assistance	\$0	\$0	\$0	\$0	\$0	\$232,564	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$232,564
35791	Customer Service and Business Assistance	Toxics/AB2588	Outreach/AB 2588 Air Toxics	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,326	\$0	\$0	\$0	\$0	\$2,326
44701	Customer Service and Business Assistance	Source Testing/Customer Svc	Conduct ST/Prov Data/Cust Svc	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,624	\$0	\$0	\$0	\$0	\$0	\$0	\$10,624
44709	Customer Service and Business Assistance	VOC Sample Analysis/SBA/Other	VOC Analysis & Rept/Cust Svc	\$0	\$0	\$0	\$0	\$0	\$0	\$106,242	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$106,242
50200	Customer Service and Business Assistance	Economic Dev/Bus Retention	Perm Proc/Public Participation	\$0	\$0	\$0	\$0	\$0	\$22,080	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$22,080



## C3-2

00425	Customer Service and Business Assistance	Fee Review	Fee Review Committee	\$0	\$0	\$0	\$22,853	\$39,744	\$36,763	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$99,359
500425	Customer Service and Business Assistance	Supp Permit Services	Supp Perm Proc/Customer Svc	\$0	\$0	\$0	\$0	\$0	\$220,798	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$220,798
50520	Customer Service and Business Assistance	Perm Proc/Pre-App Mtg Outreach	Pre-App Mtgs/Genl Prescreening	\$0	\$0	\$0	\$0	\$0	\$220,798	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$220,798
50690	Customer Service and Business Assistance	Source Education	Prov Tech Asst To Industries	\$0	\$0	\$43,276	\$494,588	\$0	\$30,912	\$49,459	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$618,235
60492	Customer Service and Business Assistance	Outreach/Business	Pub Events/Conf/Rideshare Fair	\$41,837	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$41,837
60690	Customer Service and Business Assistance	Source Education	Prov Tech Asst To Industries	\$0	\$0	\$5,857	\$66,938	\$0	\$4,184	\$6,694	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$83,673
Sub-total Customer Service and Business Assistance				\$3,039,555	\$0	\$86,458	\$3,003,857	\$1,907,217	\$1,262,993	\$139,560	\$116,866	\$0	\$2,326	\$239,677	\$0	\$0	\$0	\$9,798,508
03010	Develop Programs	AQMP	Develop/Implement AQMP	\$8,944	\$0	\$0	\$0	\$13,416	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$22,360
04009	Develop Programs	AB 1318 Mitigation	AB 1318 Projects Admin/Impl	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$27,569	\$0	\$0	\$0	\$27,569
08009	Develop Programs	AB 1318 Mitigation	AB 1318 Projects Admin/Impl	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,321	\$0	\$0	\$0	\$14,321
08010	Develop Programs	AQMP	AQMP Revision/CEQA Review	\$22,913	\$0	\$0	\$34,370	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$57,283
26002	Develop Programs	AB2766/Mobile Source	AB2766 Mobile Source Outreach	\$232,954	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$232,954
26009	Develop Programs	AB 1318 Mitigation	AB 1318 Projects Admin/Impl	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$67,198	\$0	\$67,198
26010	Develop Programs	AQMP	AQMP Special Studies	\$227,994	\$0	\$27,359	\$200,635	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$455,989
26068	Develop Programs	SCAQMD Projects	Prepare Environmental Assessments	\$329,133	\$0	\$0	\$282,114	\$329,133	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$940,397
26102	Develop Programs	CEQA Document Projects	Review/Prepare CEQA Comments	\$509,587	\$0	\$0	\$0	\$274,587	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$784,981
26104	Develop Programs	CEQA Policy Development	ID/Develop/Impl CEQA Policy	\$139,397	\$0	\$0	\$139,397	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$278,793
26128	Develop Programs	Cin Communities Pln	Cin Communities Plan Admin/Impl	\$27,999	\$0	\$0	\$0	\$27,999	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$55,999
26217	Develop Programs	Emissions Inventory Studies	Dev Emiss DB/Dev/Update Emiss	\$15,680	\$0	\$12,544	\$0	\$116,029	\$0	\$12,544	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$156,796
26218	Develop Programs	AQMP/Emissions Inventory	Dev Emiss Inv. Forecasts/RFPs	\$87,358	\$0	\$0	\$0	\$203,835	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$291,193
26219	Develop Programs	Emissions Field Audit	Emissions Field Audit	\$0	\$0	\$0	\$0	\$111,997	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$111,997
26397	Develop Programs	Lead Agency Projects	Prep Envrntmt Assmts/Perm Proj	\$0	\$0	\$0	\$0	\$0	\$391,990	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$391,990
26448	Develop Programs	Mobile Src Strategies-Off Road	CARB Off-Road Mob Src ctrl strategy for SIP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$223,994	\$0	\$0	\$0	\$223,994
26451	Develop Programs	CARB/US EPA Mob Src Fuel Policies	CARB/US EPA Mob Src Fuel Policies	\$335,992	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$335,992
26452	Develop Programs	Mob Src/CEC/US DOE Monitoring	CEC/US DOE Mob Src rulemaking proposals	\$111,997	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$111,997	\$0	\$0	\$0	\$223,994
26503	Develop Programs	PM Strategies	PM10 Plan/Analyze/Strategy Dev	\$0	\$0	\$53,311	\$0	\$647,344	\$0	\$60,926	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$761,581
26685	Develop Programs	Socio-Economic	Apply econ models/Socio-econ	\$0	\$0	\$0	\$279,675	\$1,118,702	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,398,377
26745	Develop Programs	Rideshare	Dist Rideshare/Telecommute Prog	\$136,637	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$136,637
26816	Develop Programs	Transportation Regional Progs	Dev AQMP Mess/Coord w/Reg Agn	\$78,398	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$78,398
26817	Develop Programs	Rule 2202 Implement	Rule 2202 Proc/Sub Plans Tech Eval	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$571,166	\$0	\$0	\$0	\$571,166
26836	Develop Programs	Rule 2202 Support	R2202 Suppl/Compt/Main/Websubmt	\$0	\$0	\$0	\$0	\$0	\$0	\$89,272	\$0	\$0	\$0	\$505,874	\$0	\$0	\$0	\$595,146
35560	Develop Programs	Public Notification	Public notifi of rules/hearings	\$54,513	\$0	\$0	\$34,070	\$47,699	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$136,282
44009	Develop Programs	AB 1318 Mitigation	AB 1318 Projects Admin/Impl	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$159,363	\$0	\$0	\$0	\$159,363
44069	Develop Programs	AQIP Evaluation	AQIP Contract Admin/Evaluation	\$138,114	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$138,114
44396	Develop Programs	Lawmower Exchange	Lawn Mower Admin/impl/Outreach	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$63,745	\$0	\$63,745
44458	Develop Programs	Mobile Source Strategies	Implement Fleet Rules	\$0	\$212,483	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$212,483
44542	Develop Programs	Prop 1B-Goods Movement	Prop 1B-Goods Movement	\$2,361,089	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,361,089
44702	Develop Programs	ST Methods Development	Eval ST Methods/Validate	\$0	\$0	\$0	\$0	\$201,859	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$201,859
44705	Develop Programs	ST Sample Analysis/Air Program	Analyze ST Samples/Air Prgrms	\$0	\$0	\$0	\$0	\$53,121	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$53,121
Sub-total Develop Programs				\$4,818,700	\$212,483	\$93,214	\$970,262	\$3,145,528	\$391,990	\$162,742	\$0	\$0	\$1,077,060	\$668,187	\$0	\$0	\$0	\$11,540,165
08651	Develop Rules	Rules/Legal Advice	Legal Advice: Rules/Draft Rpts	\$0	\$0	\$0	\$0	\$286,415	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$286,415
08661	Develop Rules	Rulemaking/RECLAIM	RECLAIM Legal Adv/Related Iss	\$0	\$0	\$0	\$0	\$71,604	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$71,604
26071	Develop Rules	Arch Ctgs - Admin	Rdev/Eval/DB/TA/SCAQMD/Rpts/AER	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$246,394
26077	Develop Rules	Area Sources/Rulemaking	Dev/Eval/Impl Area Source Prog	\$45,919	\$0	\$0	\$0	\$413,270	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$459,189
26165	Develop Rules	Conformity	Monitor Transp. Conformity	\$51,519	\$0	\$0	\$0	\$0	\$0	\$4,480	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$55,999
26362	Develop Rules	Health Effects	Study Health Effect/Toxicology	\$388,070	\$0	\$0	\$0	\$65,518	\$50,399	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$503,986
26085	Develop Rules	CritrIA Pollutants/Mob Srcs	Dev/Impl Intersect/Trading	\$151,196	\$0	\$16,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$167,996
26449	Develop Rules	Mob Src/SCAQMD Rulemaking	Prepare SCAQMD Mob Src rulemaking proposals	\$181,436	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$181,436
66460	Develop Rules	Regional Modeling	Rule Impact/Analyses/Model Dev	\$1,021,921	\$0	\$0	\$0	\$212,347	\$0	\$92,902	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,327,171
26654	Develop Rules	Rulemaking/NOX	Rulemaking/NOX	\$0	\$0	\$0	\$296,793	\$263,193	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$559,986
26655	Develop Rules	NSR/Adm Rulemaking	Amend/Develop NSR and Admin Rules	\$0	\$0	\$0	\$291,193	\$268,793	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$559,986
26656	Develop Rules	Rulemaking/VOC	Dev/Amend VOC Rules	\$0	\$0	\$92,874	\$703,187	\$530,707	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,326,768
26659	Develop Rules	Rulemaking/Toxics	Develop/Amend Air Toxic Rules	\$0	\$0	\$0	\$0	\$2,127,947	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,127,947
26661	Develop Rules	Rulemaking/RECLAIM	RECLAIM Amend Rules/Related Is	\$0	\$0	\$0	\$0	\$559,986	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$559,986
44456	Develop Rules	MS & AQMP Control Strategies	AQMP Control Strategies	\$0	\$63,745	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$63,745
44653	Develop Rules	Rulemaking/BACT	Dev/Amend BACT Guidelnes	\$0	\$0	\$0	\$0	\$424,967	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$424,967
44657	Develop Rules	Rulemaking/SUPPORT PRA	Assist PRA w/ Rulemaking	\$0	\$0	\$0	\$0	\$10,624	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,624
44706	Develop Rules	ST Sample Analysis/Air Program	Analyze ST Samples/ Rules	\$0	\$0	\$0	\$0	\$53,121	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$53,121
44708	Develop Rules	VOC Sample Analysis/Rules	VOC Analysis & Rptg/Rules	\$0	\$0	\$0	\$2,125	\$50,996	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$53,121
50650	Develop Rules	Rulemaking	Dev/Amend/Impl Rules	\$0	\$0	\$6,072	\$0	\$48,138	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$55,200
50657	Develop Rules	Rulemaking/Support PRA	Provide Rule Development Supp	\$0	\$0	\$0	\$0	\$55,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$55,200
50752	Develop Rules	Title III Rulemaking	Title III Dev/Implement Rules	\$0	\$0	\$0	\$0	\$55,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$55,200
50773	Develop Rules	Title V & NSR Rulemaking/Support	Title V Rules Dev/Amend/Impl	\$0	\$0	\$0	\$0	\$55,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$55,200
60657	Develop Rules	Rulemaking/Support PRA	Provide Rule Development Supp	\$0	\$0	\$0	\$0	\$104,591	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$104,591
Sub-total Develop Rules				\$1,840,061	\$63,745	\$101,071	\$1,307,972	\$5,658,807	\$50,399	\$97,382	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,365,831
04791	Ensure Compliance	Toxics/AB2588	AB2588 Toxics HS Fee Collection	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$46,810	\$0	\$0	\$0	\$0	\$46,810
08072	Ensure Compliance	Arch Ctgs - End User	Case Dispo/Rwv, Trac, Prep NOV's	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,321	\$0	\$14,321
08073	Ensure Compliance	Arch Ctgs - Other	Case Dispo/Rwv, Trac, Prep NOV's	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,321	\$0	\$14,321
08115	Ensure Compliance	Case Disposition	Trial/Dispo-Civil Case/Injunct	\$0	\$0	\$71,604	\$343,698	\$859,245	\$0	\$85,925	\$0	\$71,604	\$0	\$0	\$0	\$0	\$0	\$1,432,075
08154	Ensure Compliance	Compliance/NOV Administration	Review/Track/Prep NOV's/MSAs	\$0	\$0	\$0	\$286,415	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$286,415

## APPENDIX C 3- FY 2017-18 PROPOSED BUDGET – EXPENDITURES BY REVENUE CATEGORY

08185	Ensure Compliance	Database Management	Support IM/Dev Tracking System	\$0	\$0	\$0	\$269,811	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$269,811
08235	Ensure Compliance	Enforcement Litigation	Maj Prosecutions/Civil Actions	\$0	\$0	\$0	\$572,830	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$572,830
08366	Ensure Compliance	Hearing Board/Legal	Hear/Disp/Varian/Appeal/Rev	\$0	\$0	\$0	\$859,245	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$859,245
08380	Ensure Compliance	Interagency Coordination	Coordinate with Other Agencies	\$0	\$0	\$0	\$0	\$52,700	\$0	\$4,583	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$57,283
08403	Ensure Compliance	Legal Rep/Litigation	Prep/Hearing/Disposition	\$0	\$0	\$0	\$0	\$721,172	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$721,172
08465	Ensure Compliance	Mutual Settlement	Mutual Settlement Program	\$0	\$0	\$0	\$859,245	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$859,245
08791	Ensure Compliance	Toxics/AB2588	AB2588 Legal Advice: Plan & Impl	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,321	\$0	\$0	\$0	\$0	\$14,321
17364	Ensure Compliance	Hearing Board/Abatement Orders	Attend/Recrd/Monitr HB Mtgs	\$0	\$0	\$0	\$26,763	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$26,763
17365	Ensure Compliance	Hearing Board/Variances/Appeal	Attend/Record/Monitor HB Mtgs	\$0	\$0	\$0	\$47,096	\$0	\$0	\$56,515	\$0	\$838,308	\$0	\$0	\$0	\$0	\$0	\$941,919
26072	Ensure Compliance	Arch Ctg - End User	Compliance/Rpts/Rule Implementation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$179,196	\$0	\$179,196
26073	Ensure Compliance	Arch Ctg - Other	Compliance/Rpts/Rule Implementation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$179,196	\$0	\$179,196
26076	Ensure Compliance	Area Sources/Compliance	Area Source Compliance	\$578,887	\$0	\$81,044	\$497,843	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,157,774
26215	Ensure Compliance	Annual Emission Reporting	Annl Des/Impl/Emiss Monitor Sys	\$0	\$0	\$0	\$0	\$1,745,199	\$0	\$151,756	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,896,956
26358	Ensure Compliance	GHG Rules-Compl		\$0	\$0	\$0	\$235,194	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$235,194
26620	Ensure Compliance	Refinery Pilot Project	Refinery Pilot Project	\$0	\$0	\$0	\$0	\$55,999	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$55,999
26645	Ensure Compliance	Rule 1610 Plan Verification	Rule 1610 Plan Verification	\$156,236	\$0	\$0	\$0	\$0	\$0	\$11,760	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$167,996
26794	Ensure Compliance	Toxics/AB2588	AB2588 Core, Tracking, IWS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,911,928	\$0	\$0	\$0	\$0	\$0	\$2,911,928
27791	Ensure Compliance	Toxics/AB2588	AB2588 Database Software Supp	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$177,384	\$0	\$0	\$0	\$0	\$0	\$177,384
35111	Ensure Compliance	Call Center/CUT SMOG	Smoking Vehicle Complaints	\$1,730,275	\$0	\$130,236	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,860,511
44015	Ensure Compliance	Acid Rain Program	Acid Rain CEMS Eval/Cert	\$0	\$0	\$0	\$8,499	\$97,742	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$106,242
44072	Ensure Compliance	Arch Ctg - End User	Sample Analysis/Rpts	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$424,967	\$0	\$424,967
44105	Ensure Compliance	CEMS Certification	CEMS Review/Approval	\$0	\$0	\$0	\$0	\$0	\$653,386	\$0	\$653,386	\$0	\$0	\$0	\$0	\$0	\$0	\$1,306,773
44175	Ensure Compliance	DB/Computerization	Develop Systems/Database	\$0	\$0	\$0	\$46,746	\$14,024	\$0	\$0	\$32,722	\$0	\$0	\$0	\$0	\$0	\$0	\$93,493
44450	Ensure Compliance	Microscopic Analysis	Asbestos/PM/Metals Analysis	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$424,967	\$0	\$0	\$0	\$0	\$0	\$0	\$424,967
44500	Ensure Compliance	PM2.5 Program	Est/Operate/Maint PM2.5 Network	\$1,473,534	\$0	\$0	\$0	\$432,350	\$0	\$495,178	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,401,063
44700	Ensure Compliance	Source Testing/Compliance	Conduct ST/Prov Data/Compl	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$508,088	\$0	\$0	\$0	\$0	\$0	\$0	\$508,088
44704	Ensure Compliance	ST/Sample Analysis/Compliance	Analyze ST Samples/Compliance	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$924,934	\$0	\$0	\$0	\$0	\$0	\$0	\$924,934
44707	Ensure Compliance	VOC Sample Analysis/Compliance	VOC Analysis & Rptg/Compliance	\$0	\$0	\$106,707	\$1,417,677	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,524,384
44716	Ensure Compliance	Special Monitoring	Rule 403 Compliance Monitoring	\$386,897	\$0	\$35,172	\$80,394	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$502,464
44794	Ensure Compliance	Toxics/AB2588	Eval Protocols/Methods/ST	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$903,054	\$0	\$0	\$0	\$0	\$0	\$903,054
44795	Ensure Compliance	Toxics/Engineering	R1401 Toxics/HRA Prot/Rpt Eval	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,624	\$0	\$0	\$0	\$0	\$0	\$0	\$10,624
50156	Ensure Compliance	Perm Proc/Info to Compliance	Prov Permit Info to Compliance	\$0	\$0	\$0	\$529,916	\$0	\$132,479	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$662,395
50240	Ensure Compliance	Environmental Justice	R461/Combustion Equip Testing	\$85,007	\$0	\$0	\$0	\$25,392	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$110,399
50365	Ensure Compliance	Hearing Bd/Variances	Variances/Orders of Abatement	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$165,599	\$0	\$0	\$0	\$0	\$0	\$0	\$165,599
50377	Ensure Compliance	Inspections/RECLAIM Audits	Audit/Compliance Assurance	\$0	\$0	\$0	\$1,268,596	\$56,193	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,324,789
50492	Ensure Compliance	Customer Service	Compliance/Inspection/Follow-up	\$85,007	\$0	\$4,416	\$0	\$16,560	\$0	\$4,416	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$110,399
50605	Ensure Compliance	RECLAIM/Admin Support	Admin/Policy/Guidelines	\$0	\$0	\$0	\$645,835	\$502,316	\$287,038	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,435,189
50678	Ensure Compliance	School Siting	Identify Haz. Emission Sources near Schools	\$0	\$0	\$0	\$0	\$55,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$55,200
50680	Ensure Compliance	Small Business Assistance	Asst sm bus w/ Permit Process	\$0	\$0	\$0	\$110,399	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$110,399
50791	Ensure Compliance	Toxics/AB2588	AB2588 Rev Rpts/Risk Redplans	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$55,200	\$0	\$0	\$0	\$0	\$0	\$55,200
60070	Ensure Compliance	CARB PERP Program	CARB Audits/Statewide Equip Reg	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,045,914
60152	Ensure Compliance	Compliance/IM Related Activiti	Assist IM: Design/Review/Test	\$0	\$0	\$0	\$0	\$304,591	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$304,591
60155	Ensure Compliance	Compliance Guidelines	Procedures/Memos/Manuals	\$0	\$0	\$0	\$0	\$522,957	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$522,957
60157	Ensure Compliance	Compliance/Special Projects	Prog Audits/Data Req/Brd Supp	\$0	\$0	\$0	\$1,045,914	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,045,914
60158	Ensure Compliance	Compliance Testing	R461/Combustion Equip Testing	\$0	\$0	\$0	\$0	\$270,591	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$270,591
60365	Ensure Compliance	Hearing Bd/Variances	Variances/Orders of Abatement	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$418,366	\$0	\$0	\$0	\$0	\$0	\$0	\$418,366
60375	Ensure Compliance	Inspections	Compliance/Inspection/Follow-up	\$0	\$0	\$1,371,354	\$14,353,813	\$0	\$0	\$1,657,922	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$17,383,089
60377	Ensure Compliance	Inspections/RECLAIM Audits	Audit/Compliance Assurance	\$0	\$0	\$0	\$3,004,648	\$133,093	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,137,742
60539	Ensure Compliance	Procedure S Review	Evaluate Proc S Asbestos Plans	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$83,673	\$0	\$0	\$83,673
60550	Ensure Compliance	Public Complaints/Breakdowns	Compl/resp/Infowlup/Resolutn	\$0	\$0	\$146,428	\$648,467	\$1,129,587	\$0	\$167,346	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,091,828
60605	Ensure Compliance	RECLAIM/Admin Support	Admin/Policy/Guidelines	\$0	\$0	\$0	\$470,661	\$366,070	\$209,183	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,045,914
60678	Ensure Compliance	School Siting	Identify Haz. Emission Sources near Schools	\$0	\$0	\$0	\$0	\$10,459	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,459
60751	Ensure Compliance	Title III Inspections	Title III Comp/Insp/Follow Up	\$0	\$0	\$0	\$20,918	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20,918
60771	Ensure Compliance	Title V	Title V Comp/Insp/Follow Up	\$0	\$0	\$0	\$329,463	\$402,677	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$732,140
60791	Ensure Compliance	Toxics/AB2588	Risk Reduct Plan Rvw/Comm Mtgs	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20,918	\$0	\$0	\$0	\$0	\$0	\$20,918
Sub-total Ensure Compliance				\$4,495,844	\$0	\$1,946,961	\$27,980,087	\$7,774,117	\$1,282,086	\$2,635,401	\$2,554,721	\$1,493,876	\$4,129,615	\$0	\$83,673	\$811,999	\$1,045,914	\$56,234,296
26061	Monitoring Air Quality	Air Quality Evaluation	Air Quality Evaluation	\$503,988	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$503,988
26443	Monitoring Air Quality	MATES V		\$90,243	\$0	\$0	\$0	\$26,956	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$117,198
26445	Monitoring Air Quality	Meteorology	ModelDev/Data Analysis/Forecast	\$449,825	\$0	\$0	\$0	\$99,312	\$0	\$35,051	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$584,189
26530	Monitoring Air Quality	Photochemical Assessment	Photochemical Assessment	\$0	\$0	\$0	\$0	\$17,360	\$0	\$38,639	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$55,999
44063	Monitoring Air Quality	Ambient Air Analysis	Analyze Criteria/Tox/Pollutants	\$1,457,785	\$0	\$0	\$0	\$302,916	\$0	\$132,526	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,893,227
44064	Monitoring Air Quality	Ambient Network	Air Monitoring/Toxics Network	\$3,330,555	\$0	\$0	\$648,809	\$0	\$0	\$346,032	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,325,396
44065	Monitoring Air Quality	Air Quality Data Management	AM Audit/Validation/Reporting	\$163,612	\$0	\$0	\$0	\$27,623	\$0	\$21,248	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$212,483
44067	Monitoring Air Quality	Ambient Lead Monitoring	Lead Monitoring/Analysis/Reporting	\$0	\$0	\$0	\$106,242	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$106,242
44073	Monitoring Air Quality	Arch Ctg - Other	Sample Analysis/Rpts	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$424,967	\$0	\$424,967
44079	Monitoring Air Quality	AQ SPEC	AQ SPEC	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$637,450	\$0	\$637,450
44081	Monitoring Air Quality	Air Filtration EPA	Air Filtration EPA/Admin/Impl	\$0	\$0	\$0	\$0	\$0	\$0	\$31,873	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$31,873
44082	Monitoring Air Quality	Air Filtration Other	Air Filtration Other/Admin/Impl	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$31,873	\$0	\$31,873
44084	Monitoring Air Quality	Blk Carbon Std EPA	EPA Blk Carbon Climate Study	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$42,497	\$0	\$42,497
44240	Monitoring Air Quality	Environmental Justice	Implement Environmental Justice	\$73,625	\$0	\$0	\$0	\$21,992	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$95,618

## APPENDIX C 3- FY 2017-18 PROPOSED BUDGET – EXPENDITURES BY REVENUE CATEGORY

44248	Monitoring Air Quality	EPA Community Scale AQ-SPEC		\$0	\$0	\$0	\$0	\$0	\$0	\$16,999	\$0	\$0	\$0	\$0	\$0	\$195,485	\$0	\$0	\$212,483
44468	Monitoring Air Quality	NATTS(Natl Air Tox Trends Sta)	NATTS (Natl Air Tox Trends)	\$207,261	\$0	\$0	\$0	\$0	\$22,311	\$0	\$89,154	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$318,725
44469	Monitoring Air Quality	Near Roadway Mon	Near Roadway Monitoring	\$242,869	\$0	\$0	\$75,857	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$318,725
44505	Monitoring Air Quality	PM Sampling Program (EPA)	PM Sampling Program - Addition	\$0	\$0	\$0	\$0	\$0	\$0	\$2,252,324	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,252,324
44507	Monitoring Air Quality	PM Sampling Spec	PM Sampling Special Events	\$0	\$0	\$0	\$0	\$0	\$0	\$21,248	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$21,248
44530	Monitoring Air Quality	Photochemical Assessment	Photochemical Assess & Monitor	\$152,988	\$0	\$0	\$0	\$0	\$0	\$484,462	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$637,450
44585	Monitoring Air Quality	Quality Assurance	Quality Assurance Branch	\$537,037	\$0	\$0	\$0	\$104,618	\$0	\$55,796	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$697,450
44663	Monitoring Air Quality	Salton Sea Monit	Mon/Analyze Hydrogen Sulfide	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$53,121	\$0	\$0	\$53,121
44715	Monitoring Air Quality	Spec Monitoring/Emerg Response	Emergency Response	\$0	\$0	\$0	\$0	\$106,242	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$106,242
44821	Monitoring Air Quality	TraPac Air Filtr Prg	Admin/Tech Suppt/Repts/Monitor	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$212,483	\$0	\$0	\$212,483
60210	Monitoring Air Quality	Emergency Response	Emerg Tech Asst to Public Saf	\$0	\$0	\$628	\$0	\$20,291	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20,918
Sub-total Monitoring Air Quality				\$7,209,787	\$0	\$628	\$830,908	\$749,619	\$0	\$3,525,352	\$0	\$0	\$0	\$0	\$0	\$1,172,908	\$424,967	\$0	\$13,914,168
04071	Operational Support	Arch Ctg - Admin	Cost Analysis/Payments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,483	\$0	\$8,483
04447	Operational Support	Mobile Sources/Accounting	Record Acct Rec & Pay/Special Funds	\$137,844	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$137,844
04630	Operational Support	Cash Mgmt/Revenue Receiving	Receive/Post Pymts/Reconcile	\$0	\$0	\$0	\$668,011	\$111,335	\$222,670	\$0	\$0	\$0	\$0	\$111,335	\$0	\$0	\$0	\$0	\$1,113,352
08071	Operational Support	Arch Ctg - Admin	Rule Dev/TA/Reinterpretations	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,321	\$0	\$14,321
08102	Operational Support	CEQA Document Projects	CEQA Review	\$28,642	\$0	\$0	\$0	\$71,604	\$42,962	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$143,208
17024	Operational Support	Admin/SCAQMD/GB/HB Mgmt	Admin Governing/Hearing Brds	\$0	\$0	\$30,108	\$0	\$0	\$0	\$0	\$0	\$237,523	\$0	\$0	\$0	\$0	\$0	\$0	\$267,631
27071	Operational Support	Arch Ctg - Admin	Database Dev/Maintenance	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$60,892	\$0	\$60,892	
27215	Operational Support	Annual Emission Reporting	System Enhancements for GHG	\$0	\$0	\$0	\$0	\$103,516	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$18,268	\$0	\$0	\$121,784
27480	Operational Support	New System Development	Dev sys for special oper needs	\$0	\$0	\$0	\$210,334	\$490,780	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$701,114
27616	Operational Support	Records Services	Records/Documents processing	\$0	\$0	\$0	\$472,940	\$0	\$472,940	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$945,880
27735	Operational Support	Systems Maintenance	Maintain Existing Software Prog	\$0	\$0	\$0	\$401,598	\$401,598	\$803,196	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,606,393
Sub-total Operational Support				\$166,485	\$0	\$30,108	\$1,752,884	\$1,178,833	\$1,541,769	\$0	\$0	\$237,523	\$0	\$111,335	\$18,268	\$83,695	\$0	\$0	\$5,120,900
26148	Policy Support	Climate Change	GHG/Climate Change Policy Development	\$0	\$0	\$0	\$694,383	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$694,383
26240	Policy Support	EI-AQ Guidance Document	AQ Guidance Document	\$8,624	\$0	\$0	\$0	\$2,576	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,200
26277	Policy Support	Advisory Group/AQMP	Governing Board AQMP Advisory Group	\$8,624	\$0	\$0	\$0	\$2,576	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,200
26278	Policy Support	Advisory Group/Sci, Tech, Model	Scientific/Tech/Model Peer Rev	\$25,871	\$0	\$0	\$0	\$7,728	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$33,599
26454	Policy Support	Mob Src-Greens Gas Reduc Meas	Provide comments on mob src portion of AB32	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$199,355	\$0	\$0	\$199,355
35280	Policy Support	Advisory Group/Ethnic Comm	GB Ethnic Comm Advisory Group	\$71,630	\$0	\$0	\$0	\$21,396	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$93,026
35281	Policy Support	Advisory Group/Small Business	SBA Advisory Group Staff Support	\$17,442	\$0	\$0	\$98,840	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$116,282
35345	Policy Support	Goods Mvmt&Financial Incentive	Goods Movement & Financial Incentives Progr	\$232,564	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$232,564
35414	Policy Support	Legislation-Effects	Lobbying/Analyses/Tracking/Out	\$98,026	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$98,026
44276	Policy Support	Advisory Group/Technology Adva	Tech Adv Advisory Group Supp	\$0	\$21,248	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$21,248
44410	Policy Support	Legislation	Support Pollution Reduction thru Legislatio	\$106,242	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$106,242
50148	Policy Support	Climate Change	GHG/Climate Change Support	\$55,200	\$0	\$0	\$0	\$55,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$110,399
60148	Policy Support	Climate Change	GHG/Climate Chg Support	\$10,459	\$0	\$0	\$0	\$10,459	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20,918
60717	Policy Support	Student Interns	Gov Board/Student Intern Program	\$0	\$0	\$0	\$0	\$0	\$10,459	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,459
Sub-total Policy Support				\$634,681	\$21,248	\$0	\$793,222	\$99,934	\$10,459	\$0	\$0	\$0	\$0	\$0	\$0	\$199,355	\$0	\$0	\$1,758,900
08516	Timely Review of Permits	Permit Processing/Legal	Legal Advice: Permit Processing	\$0	\$0	\$0	\$0	\$0	\$57,283	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$57,283
08770	Timely Review of Permits	Title V	Leg Advice: Title V Prog/Perm Dev	\$0	\$0	\$0	\$2,148	\$12,173	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,321
08772	Timely Review of Permits	Title V Permits	Leg Advice: New Source Title V Permit	\$0	\$0	\$0	\$0	\$0	\$14,321	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,321
26461	Timely Review of Permits	Permit & CEQA Modeling Review	Review Model Permit/Risk Assmt	\$0	\$0	\$0	\$0	\$0	\$341,193	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$341,193
26643	Timely Review of Permits	Rule 222 Filing Program	Rule 222 Filing Program	\$0	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50,000
27523	Timely Review of Permits	Permit Streamlining	Permit Streamlining	\$0	\$0	\$0	\$0	\$0	\$60,892	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$60,892
27770	Timely Review of Permits	Title V	Dev/Maintain Title V Program	\$0	\$0	\$0	\$0	\$0	\$480,351	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$480,351
35680	Timely Review of Permits	Small Business/Permit Streamlin	Asst sm bus to comply/SCAQMD req	\$0	\$0	\$55,118	\$257,216	\$229,657	\$321,520	\$55,118	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$918,627
44545	Timely Review of Permits	Protocols/Reports/Plans	Eval Test Protocols/Cust Svc	\$0	\$0	\$0	\$8,499	\$0	\$12,749	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$21,248
44546	Timely Review of Permits	Protocols/Reports/Plans	Eval Test Protocols/Compliance	\$0	\$0	\$0	\$1,176,096	\$0	\$0	\$0	\$130,677	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,306,773
44725	Timely Review of Permits	Permit Processing/Support E&C	Assist EAC w/ Permit Process	\$0	\$0	\$0	\$0	\$0	\$10,624	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,624
50120	Timely Review of Permits	Certification/Registration Pro	Certification/Registration Prog	\$0	\$0	\$0	\$0	\$0	\$441,596	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$441,596
50253	Timely Review of Permits	ERC Appl Processing	Process ERC Applications	\$0	\$0	\$0	\$0	\$0	\$772,794	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$772,794
50367	Timely Review of Permits	Hearing Board/Appeals	Appeals: Permits & Denials	\$0	\$0	\$0	\$0	\$0	\$55,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$55,200
50475	Timely Review of Permits	NSR Implementation	Implement NSR/Allocate ERCs	\$0	\$0	\$0	\$0	\$469,196	\$38,640	\$44,160	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$551,996
50476	Timely Review of Permits	NSR Data Clean Up	Edit/Update NSR Data	\$0	\$0	\$0	\$0	\$110,399	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$110,399
50515	Timely Review of Permits	Perm Proc/Non TV/Non RECLAIM	PP: Non Title V/Title III/RECLAIM	\$0	\$0	\$0	\$0	\$0	\$11,452,309	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,452,309
50517	Timely Review of Permits	Permit Services	Facility Data-Create/Edit	\$0	\$0	\$0	\$0	\$0	\$2,759,978	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,759,978
50518	Timely Review of Permits	RECLAIM Non-Title V	Process RECLAIM Only Permits	\$0	\$0	\$69,551	\$178,847	\$0	\$745,194	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$993,592
50519	Timely Review of Permits	Perm Proc/Title III (Non TV)	Process Title III Permits	\$0	\$0	\$0	\$0	\$0	\$220,798	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$220,798
50521	Timely Review of Permits	Perm Proc/Expedited Permit	Proc Expedited Permits (3010T)	\$0	\$0	\$0	\$0	\$0	\$883,193	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$883,193
50523	Timely Review of Permits	Permit Streamlining	Permit Streamlining	\$0	\$0	\$0	\$0	\$0	\$827,993	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$827,993
50607	Timely Review of Permits	RECLAIM & Title V	Process RECLAIM & TV Permits	\$0	\$0	\$0	\$0	\$0	\$4,082,687	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,082,687
50643	Timely Review of Permits	Rule 222 Filing Program	Rule 222 Filing Program	\$0	\$0	\$0	\$110,399	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$110,399
50728	Timely Review of Permits	Perm Proc/IM Programming	Assist IM: Design/Review/Test	\$0	\$0	\$0	\$56,304	\$56,304	\$450,428	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$563,035
50774	Timely Review of Permits	TV/Non-RECLAIM	Process Title V Only Permits	\$0	\$0	\$0	\$0	\$0	\$3,974,368	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,974,368
50775	Timely Review of Permits	Title V - Admin	Title V Administration	\$0	\$0	\$0	\$0	\$0	\$220,798	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$220,798
Timely Review of Permits				\$0	\$0	\$124,669	\$1,839,508	\$877,728	\$28,224,909	\$99,277	\$130,677	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$31,296,769
Total Expenditures				\$26,899,224	\$5,121,835	\$2,383,108	\$38,478,700	\$21,391,784	\$32,764,606	\$6,848,824	\$2,802,264	\$1,731,399	\$4,131,940	\$1,428,072	\$3,284,180	\$1,567,055	\$1,045,914	\$149,878,906	

**APPENDIX C 4- COMPARISON OF EXPENDITURES BY REVENUE CATEGORIES: II EMISSION FEES**

WP Code	Program Category	Project Description	Activities/Outputs	FY 2016-17 Adopted	FY 2017-18 Proposed	Increase/ (Decrease)
04170	Customer Service and Business Assistance	Billing Services	Answer/Resp/Resolv Prob & Inq	\$ 156,963	\$ 171,204	\$ 14,240
04260	Customer Service and Business Assistance	Fee Review	Cmte Mtg/Fee-Related Complaint	13,599	14,845	1,246
08404	Customer Service and Business Assistance	Legal Rep/Legislation	Draft Legis/SCAQMD Position/Mtgs	9,780	50,123	40,342
08681	Customer Service and Business Assistance	Small Business/Legal Advice	Legal Advice: SB/Fee Review	6,986	7,160	174
26216	Customer Service and Business Assistance	AER Public Assistance	AER Design/Impl/Monitor Emiss	442,186	447,989	5,803
35126	Customer Service and Business Assistance	Clean Air Connections	Coord of region-wide community group	50,146	53,490	3,344
35205	Customer Service and Business Assistance	Environmental Education	Curriculum Dev/Project Coord	23,983	25,582	1,599
35240	Customer Service and Business Assistance	Environmental Justice	Impl Board's EJ Pgrms/Policies	283,434	302,333	18,899
35260	Customer Service and Business Assistance	Fee Review	Cmte Mtg/Fee-Related Complaint	43,605	46,513	2,908
35390	Customer Service and Business Assistance	Intergov/Geographic Deployment	Dev/Impl Local Govt Outreach	485,127	516,892	31,765
35491	Customer Service and Business Assistance	Outreach/Business	Chambers/Business Meetings	92,250	93,026	775
35492	Customer Service and Business Assistance	Public Education/Public Events	Pub Events/Conf/Rideshare Fair	94,204	96,385	2,181
35555	Customer Service and Business Assistance	Public Information Center	Inform public of unhealthy air	40,043	41,933	1,890
50260	Customer Service and Business Assistance	Fee Review	Fee Review Committee	36,695	39,744	3,048
Sub-total Customer Service and Business Assistance				\$ 1,779,003	\$ 1,907,217	\$ 128,214
03010	Develop Programs	AQMP	Develop/Implement AQMP	\$ 9,946	\$ 13,416	\$ 3,470
26068	Develop Programs	SCAQMD Projects	Prepare Environmental Assessments	383,768	329,133	(54,635)
26102	Develop Programs	CEQA Document Projects	Review/Prepare CEQA Comments	309,530	274,393	(35,137)
26128	Develop Programs	Cln Communities Pln	Cln Communities Plan Admn/Impl	22,109	27,999	5,890
26217	Develop Programs	Emissions Inventory Studies	Dev Emiss DB/Dev/Update Emiss	327,218	116,029	(211,189)
26218	Develop Programs	AQMP/Emissions Inventory	Dev Emiss Inv: Forecasts/RFPs	201,195	203,835	2,640
26219	Develop Programs	Emissions Field Audit	Emissions Field Audit	110,547	111,997	1,451
26503	Develop Programs	PM Strategies	PM10 Plan/Analyze/Strategy Dev	930,249	647,344	(282,905)
26685	Develop Programs	Socio-Economic	Apply econ models/Socio-econ	1,071,098	1,118,702	47,604
35560	Develop Programs	Public Notification	Public notif of rules/hearings	45,155	47,699	2,544
44702	Develop Programs	ST Methods Development	Eval ST Methods/Validate	198,922	201,859	2,937
44705	Develop Programs	ST Sample Analysis/Air Program	Analyze ST Samples/Air Prgms	52,348	53,121	773
Sub-total Develop Programs				\$ 3,662,084	\$ 3,145,528	\$ (516,556)

## APPENDIX C 4- COMPARISON OF EXPENDITURES BY REVENUE CATEGORIES: II EMISSION FEES

WP Code	Program Category	Project Description	Activities/Outputs	FY 2016-17 Adopted	FY 2017-18 Proposed	Increase/ (Decrease)
03385	Develop Rules	Credit Generation Programs	Dev/Impl Marketable Permit	\$ 6,631	\$ -	\$ (6,631)
08651	Develop Rules	Rules/Legal Advice	Legal Advice: Rules/Draft Regs	279,441	286,415	6,974
08661	Develop Rules	Rulemaking/RECLAIM	RECLAIM Legal Adv/Related Iss	13,972	71,604	57,632
26077	Develop Rules	Area Sources/Rulemaking	Dev/Eval/Impl Area Source Prog	397,967	413,270	15,302
26362	Develop Rules	Health Effects	Study Health Effect/Toxicology	54,610	65,518	10,908
26460	Develop Rules	Regional Modeling	Rule Impact/Analyses/Model Dev	209,887	212,347	2,460
26654	Develop Rules	Rulemaking/NOX	Rulemaking/NOx	280,567	263,193	(17,374)
26655	Develop Rules	NSR/Adm Rulemaking	Amend/Develop NSR & Admin Rules	212,249	268,793	56,544
26656	Develop Rules	Rulemaking/VOC	Dev/Amend VOC Rules	325,312	530,707	205,396
26659	Develop Rules	Rulemaking/Toxics	Develop/Amend Air Toxic Rules	1,658,198	2,127,947	469,750
26661	Develop Rules	Rulemaking/RECLAIM	RECLAIM Amend Rules/Related Is	126,023	559,986	433,963
44653	Develop Rules	Rulemaking/BACT	Dev/Amend BACT Guidelines	418,783	424,967	6,183
44657	Develop Rules	Rulemaking/Support PRA	Assist PRA w/ Rulemaking	10,470	10,624	155
44706	Develop Rules	ST Sample Analysis/Air Program	Analyze ST Samples/Rules	52,348	53,121	773
44708	Develop Rules	VOC Sample Analysis/Rules	VOC Analysis & Rptg/Rules	50,254	50,996	742
50650	Develop Rules	Rulemaking	Dev/Amend/Impl Rules	90,719	49,128	(41,592)
50657	Develop Rules	Rulemaking/Support PRA	Provide Rule Development Supp	101,932	55,200	(46,732)
50752	Develop Rules	Title III Rulemaking	Title III Dev/Implement Rules	50,966	55,200	4,234
50773	Develop Rules	Title V & NSR Rulemaking-Supp	Title V Rules Dev/Amend/Impl	50,966	55,200	4,234
60657	Develop Rules	Rulemaking/Support PRA	Provide Rule Development Supp	-	104,591	104,591
Sub-total Develop Rules				\$ 4,391,294	\$ 5,658,807	\$1,267,513
08115	Ensure Compliance	Case Disposition	Trial/Dispo-Civil Case/Injunct	\$ 838,323	\$ 859,245	\$ 20,922
08380	Ensure Compliance	Interagency Coordination	Coordinate with Other Agencies	51,417	52,700	1,283
08403	Ensure Compliance	Legal Rep/Litigation	Prep/Hearing/Disposition	697,526	721,172	23,646
26215	Ensure Compliance	Annual Emission Reporting	Annl Des/Impl/Emiss Monitor Sys	1,530,142	1,745,199	215,057
26620	Ensure Compliance	Refinery Pilot Project	Refinery Pilot Project	55,273	55,999	725
44015	Ensure Compliance	Acid Rain Program	Acid Rain CEMS Eval/Cert	96,320	97,742	1,422
44175	Ensure Compliance	DB/Computerization	Develop Systems/Database	13,820	14,024	204
44500	Ensure Compliance	PM2.5 Program	Est/Operate/Maint PM2.5 Network	426,059	432,350	6,291
50152	Ensure Compliance	Compliance/IM Related Activiti	Assist IM: Design/Review/Test	101,932	-	(101,932)
50155	Ensure Compliance	Compliance Guidelines	Procedures/Memos/Manuals	101,932	-	(101,932)
50158	Ensure Compliance	Compliance Testing	R461/Combustion Equip Testing	208,863	-	(208,863)
50240	Ensure Compliance	Environmental Justice	R461/Combustion Equip Testing	-	25,392	25,392

**APPENDIX C 4- COMPARISON OF EXPENDITURES BY REVENUE CATEGORIES: II EMISSION FEES**

WP Code	Program Category	Project Description	Activities/Outputs	FY 2016-17 Adopted	FY 2017-18 Proposed	Increase/ (Decrease)
50377	Ensure Compliance	Inspections/RECLAIM Audits	Audit/Compliance Assurance	205,805	56,193	(149,611)
50492	Ensure Compliance	Customer Service	Compliance/Inspection/Follow-up	-	16,560	16,560
50550	Ensure Compliance	Public Complaints/Breakdowns	Compltresp/Invflwup/Resolutn	1,100,863	-	(1,100,863)
50605	Ensure Compliance	RECLAIM/Admin Support	Admin/Policy/Guidelines	713,522	502,316	(211,206)
50678	Ensure Compliance	School Siting	Identify Haz. Emission Sources near Schools	203,863	55,200	(148,664)
50771	Ensure Compliance	Title V Inspections	Title V Compl/Inspect/Follow Up	1,233,374	-	(1,233,374)
60152	Ensure Compliance	Compliance/IM Related Activiti	Assist IM: Design/Review/Test	-	304,591	304,591
60155	Ensure Compliance	Compliance Guidelines	Procedures/Memos/Manuals	-	522,957	522,957
60158	Ensure Compliance	Compliance Testing	R461/Combustion Equip Testing	-	270,591	270,591
60377	Ensure Compliance	Inspections/RECLAIM Audits	Audit/Compliance Assurance	-	133,093	133,093
60550	Ensure Compliance	Public Complaints/Breakdowns	Compltresp/Invflwup/Resolutn	-	1,129,587	1,129,587
60605	Ensure Compliance	RECLAIM/Admin Support	Admin/Policy/Guidelines	-	366,070	366,070
60678	Ensure Compliance	School Siting	Identify Haz. Emission Sources near Schools	-	10,459	10,459
60771	Ensure Compliance	Title V	Title V Compl/Inspect/Follow Up	-	402,677	402,677
Sub-total Ensure Compliance				\$ 7,579,034	\$ 7,774,117	\$ 195,083
26443	Monitoring Air Quality	MATES V	MATES V	\$ -	\$ 26,956	\$ 26,956
26445	Monitoring Air Quality	Meteorology	ModelDev/Data Analysis/Forecast	93,559	99,312	5,753
26530	Monitoring Air Quality	Photochemical Assessment	Photochemical Assessment	17,135	17,360	225
44063	Monitoring Air Quality	Ambient Air Analysis	Analyze Criteria/Tox/Pollutants	265,006	302,916	37,910
44065	Monitoring Air Quality	Air Quality Data Management	AM Audit/Validation/Reporting	27,221	27,623	402
44240	Monitoring Air Quality	Environmental Justice	Implement Environmental Justice	21,672	21,992	320
44468	Monitoring Air Quality	NATTS(Natl Air Tox Trends Sta)	NATTS (Natl Air Tox Trends)	21,986	22,311	325
44585	Monitoring Air Quality	Quality Assurance	Quality Assurance Branch	94,226	104,618	10,391
44715	Monitoring Air Quality	Spec Monitoring/Emerg Response	Emergency Response	104,696	106,242	1,546
50210	Monitoring Air Quality	Emergency Response	Emerg Tech Asst to Public Saf	49,437	-	(49,437)
60210	Monitoring Air Quality	Emergency Response	Emerg Tech Asst to Public Saf	-	20,291	20,291
Sub-total Monitoring Air Quality				\$ 694,938	\$ 749,619	\$ 54,681
04630	Operational Support	Cash Mgmt/Revenue Receiving	Receive/Post Pymts/Reconcile	\$ 101,990	\$ 111,335	\$ 9,345
08102	Operational Support	CEQA Document Projects	CEQA Review	139,720	71,604	(68,117)
27215	Operational Support	Annual Emission Reporting	System Enhancements for GHG	100,450	103,516	3,066
27480	Operational Support	New System Development	Dev sys for special oper needs	543,378	490,780	(52,598)
27735	Operational Support	Systems Maintenance	Maintain Existing Software Prog	393,447	401,598	8,151

**APPENDIX C 4- COMPARISON OF EXPENDITURES BY REVENUE CATEGORIES: II EMISSION FEES**

WP Code	Program Category	Project Description	Activities/Outputs	FY 2016-17 Adopted	FY 2017-18 Proposed	Increase/ (Decrease)
26240	Policy Support	EJ-AQ Guidance Document	AQ Guidance Document	\$ 20,341	\$ 2,576	\$ (17,765)
26277	Policy Support	Advisory Group/AQMP	Governing Board AQMP Advisory Group	2,543	2,576	33
26278	Policy Support	Advisory Group/Sci,Tech,Model	Scientific/Tech/Model Peer Rev	58,479	7,728	(50,751)
35280	Policy Support	Advisory Group/Ethnic Comm	GB Ethnic Comm Advisory Group	20,058	21,396	1,337
50148	Policy Support	Climate Change	GHG/Climate Change Support	50,966	55,200	4,234
60148	Policy Support	Climate Change	GHG/Climate Chg Support	-	10,459	10,459
Sub-total Policy Support				\$ 152,386	\$ 99,934	\$ (52,452)
08770	Timely Review of Permits	Title V	Leg Advice: Title V Prog/Perm Dev	\$ 11,876	\$ 12,173	\$ 296
35680	Timely Review of Permits	Small Business/Permit Streamln	Asst sm bus to comply/SCAQMD req	215,301	229,657	14,356
50475	Timely Review of Permits	NSR Implementation	Implement NSR/Allocate ERCs	433,210	469,196	35,986
50476	Timely Review of Permits	NSR Data Clean Up	Edit/Update NSR Data	101,932	110,399	8,467
50728	Timely Review of Permits	Perm Proc/IM Programming	Assist IM: Design/Review/Test	40,773	56,304	15,531
Sub-total Timely Review of Permits				\$ 803,091	\$ 877,728	\$ 74,637
Total Expenditures				\$ 20,340,816	\$ 21,391,784	\$ 1,050,968



**APPENDIX C 4- COMPARISON OF EXPENDITURES BY REVENUE CATEGORIES: III PERMIT PROCESSING FEES**

WP Code	Program Category	Project Description	Activities/Outputs	FY 2016-17 Adopted	FY 2017-18 Proposed	Increase/ (Decrease)
04170	Customer Service and Business Assistance	Billing Services	Answer/Resp/Resolv Prob & Inq	\$ 156,963	\$ 171,204	\$ 14,240
04260	Customer Service and Business Assistance	Fee Review	Cmte Mtg/Fee-Related Complaint	2,914	3,181	267
04631	Customer Service and Business Assistance	Cash Mgmt/Refunds	Research/Doc/Prep/Proc Refunds	40,796	44,534	3,738
08681	Customer Service and Business Assistance	Small Business/Legal Advice	Legal Advice: SB/Fee Review	6,986	7,160	174
27481	Customer Service and Business Assistance	New System Development	Dev sys in supp of Dist-wide	377,530	251,374	(126,156)
35260	Customer Service and Business Assistance	Fee Review	Cmte Mtg/Fee-Related Complaint	16,352	17,442	1,090
35679	Customer Service and Business Assistance	Small Business Assistance	Small Business/Financial Assistance	218,026	232,564	14,538
50200	Customer Service and Business Assistance	Economic Dev/Bus Retention	Perm Proc/Public Participation	20,386	22,080	1,693
50260	Customer Service and Business Assistance	Fee Review	Fee Review Committee	33,943	36,763	2,820
50425	Customer Service and Business Assistance	Lobby Permit Services	Supp Perm Proc/Customer Svc	203,863	220,798	16,935
50520	Customer Service and Business Assistance	Perm Proc/Pre-Appl Mtg Outreac	Pre-App Mtgs/Genl Prescreening	815,454	220,798	(594,656)
50690	Customer Service and Business Assistance	Source Education	Prov Tech Asst To Industries	28,541	30,912	2,371
60690	Customer Service and Business Assistance	Source Education	Prov Tech Asst To Industries	-	4,184	4,184
Sub-total Customer Service and Business Assistance				\$ 1,921,755	\$ 1,262,993	\$ (658,761)
26397	Develop Programs	Lead Agency Projects	Prep Envrnmt Assmts/Perm Proj	\$ 243,202	\$ 391,990	\$ 148,788
26362	Develop Rules	Health Effects	Study Health Effect/Toxicology	\$ 42,008	\$ 50,399	\$ 8,391
44105	Ensure Compliance	CEMS Certification	CEMS Review/Approval	643,879	653,386	9,507
50156	Ensure Compliance	Perm Proc/Info to Compliance	Prov Permit Info to Compliance	122,318	132,479	10,161
50605	Ensure Compliance	RECLAIM/Admin Support	Admin/Policy/Guidelines	407,727	287,038	(120,689)
60605	Ensure Compliance	RECLAIM/Admin Support	Admin/Policy/Guidelines	-	209,183	209,183
Sub-total Ensure Compliance				\$ 1,173,924	\$ 1,282,086	\$ 108,162
04630	Operational Support	Cash Mgmt/Revenue Receiving	Receive/Post Pymts/Reconcile	\$ 203,980	\$ 222,670	\$ 18,690
08102	Operational Support	CEQA Document Projects	CEQA Review	83,832	42,962	(40,870)
27616	Operational Support	Records Services	Records/Documents processing	505,495	472,940	(32,556)
27735	Operational Support	Systems Maintenance	Maintain Existing Software Prog	786,894	803,196	16,303
Sub-total Operational Support				\$ 1,580,202	\$ 1,541,769	\$ (38,433)



**APPENDIX C 4- COMPARISON OF EXPENDITURES BY REVENUE CATEGORIES: III PERMIT PROCESSING FEES**

WP Code	Program Category	Project Description	Activities/Outputs	FY 2016-17 Adopted	FY 2017-18 Proposed	Increase/ (Decrease)
60717	Policy Support	Student Interns	Gov Board/Student Intern Program	\$ -	\$ 10,459	\$ 10,459
08516	Timely Review of Permits	Permit Processing/Legal	Legal Advice: Permit Processing	\$ 55,888	\$ 57,283	\$ 1,395
08772	Timely Review of Permits	Title V Permits	Leg Advice: New Source Title V Permit	13,972	14,321	349
26461	Timely Review of Permits	Permit & CEQA Modeling Review	Review Model Permit/Risk Assmt	381,640	341,193	(40,447)
27523	Timely Review of Permits	Permit Streamlining	Permit Streamlining	59,088	60,892	1,804
27770	Timely Review of Permits	Title V	Dev/Maintain Title V Program	236,353	480,351	243,998
35680	Timely Review of Permits	Small Business/Permit Streamln	Asst sm bus to comply/SCAQMD req	301,421	321,520	20,098
44545	Timely Review of Permits	Protocols/Reports/Plans	Eval Test Protocols/Cust Svc	12,563	12,749	186
44725	Timely Review of Permits	Permit Processing/Support E&C	Assist EAC w/ Permit Process	10,470	10,624	155
50120	Timely Review of Permits	Certification/Registration Pro	Certification/Registration Prog	-	441,596	441,596
50253	Timely Review of Permits	ERC Appl Processing	Process ERC Applications	713,522	772,794	59,272
50367	Timely Review of Permits	Hearing Board/Appeals	Appeals: Permits & Denials	101,932	55,200	(46,732)
50475	Timely Review of Permits	NSR Implementation	Implement NSR/Allocate ERCs	35,676	38,640	2,964
50515	Timely Review of Permits	Perm Proc/Non TV/Non RECLAIM	PP: Non TitIV/TitIII/RECLAIM	11,711,377	11,452,309	(259,068)
50517	Timely Review of Permits	Permit Services	Facility Data-Create/Edit	2,548,293	2,759,978	211,685
50518	Timely Review of Permits	RECLAIM Non-Title V	Process RECLAIM Only Permits	688,039	745,194	57,155
50519	Timely Review of Permits	Perm Proc/Title III (Non TV)	Process Title III Permits	203,863	220,798	16,935
50521	Timely Review of Permits	Perm Proc/Expedited Permit	Proc Expedited Permits (301OT)	101,932	883,193	781,261
50523	Timely Review of Permits	Permit Streamlining	Permit Streamlining	764,488	827,993	63,505
50607	Timely Review of Permits	RECLAIM & Title V	Process RECLAIM & TV Permits	2,527,907	4,082,687	1,554,780
50728	Timely Review of Permits	Perm Proc/IM Programming	Assist IM: Design/Review/Test	326,182	450,428	124,247
50774	Timely Review of Permits	TV/Non-RECLAIM	Process Title V Only Permits	3,669,543	3,974,368	304,826
50775	Timely Review of Permits	Title V – Admin	Title V Administration	203,863	220,798	16,935
Sub-total Timely Review of Permits				\$ 24,668,013	\$ 28,224,909	\$ 3,556,897
Total Expenditures				\$ 29,629,103	\$ 32,764,606	\$ 3,135,502

**APPENDIX C 4- COMPARISON OF EXPENDITURES BY REVENUE CATEGORIES: IV ANNUAL OPERATING FEES**

WP Code	Program Category	Project Description	Activities/Outputs	FY 2016-17 Adopted	FY 2017-18 Proposed	Increase/ (Decrease)
04170	Customer Service and Business Assistance	Billing Services	Answer/Resp/Resolv Prob & Inq	\$ 1,255,707	\$ 1,369,629	\$ 113,923
04260	Customer Service and Business Assistance	Fee Review	Cmte Mtg/Fee-Related Complaint	1,748	1,909	160
04355	Customer Service and Business Assistance	Grants Management	Grant Anlyz/Eval/Negot/Acc/Rpt	170,955	186,619	15,664
04631	Customer Service and Business Assistance	Cash Mgmt/Refunds	Research/Doc/Prep/Proc Refunds	11,656	12,724	1,068
16720	Customer Service and Business Assistance	Subscription Services	Rule & Gov Board Materials	422,610	429,982	7,372
35240	Customer Service and Business Assistance	Environmental Justice	Impl Board's EJ Pgrms/Policies	152,618	162,795	10,176
35260	Customer Service and Business Assistance	Fee Review	Cmte Mtg/Fee-Related Complaint	43,605	46,513	2,908
35491	Customer Service and Business Assistance	Outreach/Business	Chambers/Business Meetings	138,376	139,538	1,163
35514	Customer Service and Business Assistance	Permit: Expired Permit Program	Assist w Permit Reinstatement	65,408	69,769	4,361
50260	Customer Service and Business Assistance	Fee Review	Fee Review Committee	21,100	22,853	1,753
50690	Customer Service and Business Assistance	Source Education	Prov Tech Asst To Industries	456,654	494,588	37,934
60690	Customer Service and Business Assistance	Source Education	Prov Tech Asst To Industries	-	66,938	66,938
Sub-total Customer Service and Business Assistance				\$ 2,740,437	\$ 3,003,857	\$ 263,420
08010	Develop Programs	AQMP	AQMP Revision/CEQA Review	\$ 33,533	\$ 34,370	\$ 837
26010	Develop Programs	AQMP	AQMP Special Studies	198,082	200,635	2,553
26068	Develop Programs	SCAQMD Projects	Prepare Environmental Assessments	328,944	282,114	(46,830)
26104	Develop Programs	CEQA Policy Development	ID/Develop/Impl CEQA Policy	104,492	139,397	34,905
26685	Develop Programs	Socio-Economic	Apply econ models/Socio-econ	267,774	279,675	11,901
35560	Develop Programs	Public Notification	Public notif of rules/hearings	32,253	34,070	1,817
Sub-Total Develop Programs				\$ 965,079	\$ 970,262	\$ 5,183
03650	Develop Rules	Rules	Develop & Implement Rules	\$ 12,598	\$ -	\$ (12,598)
26385	Develop Rules	Criteria Pollutants/Mob Srcs	Dev/Impl Intercredit Trading	16,582	16,800	218
26654	Develop Rules	Rulemaking/NOX	Rulemaking/NOx	316,384	296,793	(19,591)
26655	Develop Rules	NSR/Adm Rulemaking	Amend/Develop NSR & Admin Rules	229,937	291,193	61,256
26656	Develop Rules	Rulemaking/VOC	Dev/Amend VOC Rules	431,038	703,187	272,149
Sub-total Develop Rules				\$ 1,006,539	\$ 1,307,972	\$ 301,433
08115	Ensure Compliance	Case Disposition	Trial/Dispo-Civil Case/Injunct	\$ 335,329	\$ 343,698	\$ 8,369
08154	Ensure Compliance	Compliance/NOV Administration	Review/Track/Prep NOVs/MSAs	335,329	286,415	(48,914)
08185	Ensure Compliance	Database Management	Support IM/Dev Tracking System	104,860	269,811	164,951
08235	Ensure Compliance	Enforcement Litigation	Maj Prosecutions/Civil Actions	558,882	572,830	13,948

**APPENDIX C 4- COMPARISON OF EXPENDITURES BY REVENUE CATEGORIES: IV ANNUAL OPERATING FEES**

WP Code	Program Category	Project Description	Activities/Outputs	FY 2016-17 Adopted	FY 2017-18 Proposed	Increase/ (Decrease)
08366	Ensure Compliance	Hearing Board/Legal	Hear/Disp-Varian/Appeal/Rev	838,323	859,245	20,922
08465	Ensure Compliance	Mutual Settlement	Mutual Settlement Program	838,323	859,245	20,922
17364	Ensure Compliance	Hearing Board/Abatement Orders	Attnd/Recrd/Monitr Mtgs	24,194	26,763	2,569
17365	Ensure Compliance	Hearing Board/Variations/Appeal	Attend/Record/Monitor HB Mtgs	39,980	47,096	7,115
26076	Ensure Compliance	Area Sources/Compliance	Area Source Compliance	496,850	497,843	993
26358	Ensure Compliance	GHG Rules-Compl	GHG Rules-Compl	-	235,194	235,194
26716	Ensure Compliance	Spec Monitoring/R403	Rule 403 Compliance Monitoring	37,144	0	(37,144)
44015	Ensure Compliance	Acid Rain Program	Acid Rain CEMS Eval/Cert	8,376	8,499	124
44175	Ensure Compliance	DB/Computerization	Develop Systems/Database	46,066	46,746	680
44707	Ensure Compliance	VOC Sample Analysis/Compliance	VOC Analysis & Rptg/Compliance	1,397,550	1,417,677	20,127
44716	Ensure Compliance	Special Monitoring	Rule 403 Compliance Monitoring	79,306	80,394	1,088
50156	Ensure Compliance	Perm Proc/Info to Compliance	Prov Permit Info to Compliance	489,272	529,916	40,643
50157	Ensure Compliance	Compliance/Special Projects	Prog Audits/Data Req/Board Supp	1,019,317	0	(1,019,317)
50375	Ensure Compliance	Inspections	Compliance/Inspection/Follow-up	13,332,295	0	(13,332,295)
50377	Ensure Compliance	Inspections/RECLAIM Audits	Audit/Compliance Assurance	4,646,146	1,268,596	(3,377,550)
50550	Ensure Compliance	Public Complaints/Breakdowns	Compltresp/Invflwup/Resolutn	631,977	0	(631,977)
50605	Ensure Compliance	RECLAIM/Admin Support	Admin/Policy/Guidelines	917,386	645,835	(271,551)
50680	Ensure Compliance	Small Business Assistance	Asst sm bus w/ Permit Process	101,932	110,399	8,467
50751	Ensure Compliance	Title III Inspections	Title III Comp/Insp/Follow Up	101,932		(101,932)
50771	Ensure Compliance	Title V Inspections	Title V Compl/Inspect/Follow Up	1,009,124	0	(1,009,124)
60157	Ensure Compliance	Compliance/Special Projects	Prog Audits/Data Req/Brd Supp	-	1,045,914	1,045,914
60375	Ensure Compliance	Inspections	Compliance/Inspection/Follow-up	-	14,353,813	14,353,813
60377	Ensure Compliance	Inspections/RECLAIM Audits	Audit/Compliance Assurance	-	3,004,648	3,004,648
60550	Ensure Compliance	Public Complaints/Breakdowns	Compltresp/Invflwup/Resolutn	-	648,467	648,467
60605	Ensure Compliance	RECLAIM/Admin Support	Admin/Policy/Guidelines	-	470,661	470,661
60751	Ensure Compliance	Title III Inspections	Title III Comp/Insp/Follow Up	-	20,918	20,918
60771	Ensure Compliance	Title V	Title V Compl/Inspect/Follow Up	-	329,463	329,463
Sub-total Ensure Compliance				\$ 27,389,892	\$ 27,980,087	\$ 590,195
44064	Monitoring Air Quality	Ambient Network	Air Monitoring/Toxics Network	\$ 614,477	\$ 648,809	\$ 34,333
44067	Monitoring Air Quality	Ambient Lead Monitoring	Lead Monitoring/Analysis/Reporting	104,696	106,242	1,546
44469	Monitoring Air Quality	Near Roadway Mon	Near Roadway Monitoring	46,485	75,857	29,372
Sub-total Monitor Air Quality				\$ 765,657	\$ 830,908	\$ 65,250

**APPENDIX C 4- COMPARISON OF EXPENDITURES BY REVENUE CATEGORIES: IV ANNUAL OPERATING FEES**

WP Code	Program Category	Project Description	Activities/Outputs	FY 2016-17 Adopted	FY 2017-18 Proposed	Increase/ (Decrease)
04630	Operational Support	Cash Mgmt/Revenue Receiving	Receive/Post Pymts/Reconcile	\$ 611,940	\$ 668,011	\$ 56,071
27480	Operational Support	New System Development	Dev sys for special oper needs	232,876	210,334	(22,542)
27616	Operational Support	Records Services	Records/Documents processing	505,495	472,940	(32,556)
27735	Operational Support	Systems Maintenance	Maintain Existing Software Prog	393,447	401,598	8,151
Sub-total Operational Support				\$ 1,743,759	\$ 1,752,884	\$ 9,125
26148	Policy Support	Climate Change	GHG/Climate Change Policy Development	\$ 489,295	\$ 694,383	\$ 205,087
35281	Policy Support	Advisory Group/Small Business	SBA Advisory Group Staff Support	92,661	98,840	6,179
Sub-total Policy Support				\$ 581,956	\$ 793,222	\$ 211,266
08770	Timely Review of Permits	Title V	Leg Advice: Title V Prog/Perm Dev	\$ 2,096	\$ 2,148	\$ 52
26643	Timely Review of Permits	Rule 222 Filing Program	Rule 222 Filing Program	50,000	50,000	-
35680	Timely Review of Permits	Small Business/Permit Streamln	Asst sm bus to comply/SCAQMD req	241,137	257,216	16,079
44545	Timely Review of Permits	Protocols/Reports/Plans	Eval Test Protocols/Cust Svc	8,376	8,499	124
44546	Timely Review of Permits	Protocols/Reports/Plans	Eval Test Protocols/Compliance	1,158,983	1,176,096	17,113
50518	Timely Review of Permits	RECLAIM Non-Title V	Process RECLAIM Only Permits	165,129	178,847	13,717
50643	Timely Review of Permits	Rule 222 Filing Program	Rule 222 Filing Program	-	110,399	110,399
50728	Timely Review of Permits	Perm Proc/IM Programming	Assist IM: Design/Review/Test	40,773	56,304	15,531
Sub-total Timely Review of Permits				\$ 1,666,493	\$ 1,839,508	\$ 173,015
Total Expenditures				\$ 36,859,812	\$ 38,478,700	\$ 1,618,888

**APPENDIX C 4- COMPARISON OF EXPENDITURES BY REVENUE CATEGORIES: V FEDERAL GRANTS/OTHER FEDERAL REVENUE**

WP Code	Program Category	Project Description	Activities/Outputs	FY 2016-17 Adopted	FY 2017-18 Proposed	Increase/ (Decrease)
44187	Advance Clean Air Technology	DERA Sch Bus Repl	DERA Sch Bus Repl Admin/Impl	\$ 6,282	\$ 6,375	\$ 93
44190	Advance Clean Air Technology	Diesel Projects EPA	Diesel Projects EPA/Admin/Impl	23,033	23,373	340
44497	Advance Clean Air Technology	Plug-in Hybrid EV DOE ARRA	DOE Plug-in Hybrid EV Admin (ARRA)	157,044	159,363	2,319
Sub-total Advance Clean Air Technology				\$ 186,359	\$ 189,110	\$ 2,752
04355	Customer Service and Business Assistance	Grants Management	Grant Anlyz/Eval/Negot/Acc/Rpt	\$ 23,312	\$ 25,448	\$ 2,136
35492	Customer Service and Business Assistance	Public Education/Public Events	Pub Events/Conf/Rideshare Fair	25,121	25,703	582
35555	Customer Service and Business Assistance	Public Information Center	Inform public of unhealthy air	30,803	32,256	1,454
50690	Customer Service and Business Assistance	Source Education	Prov Tech Asst To Industries	45,665	49,459	3,793
60690	Customer Service and Business Assistance	Source Education	Prov Tech Asst To Industries	-	6,694	6,694
Sub-total Customer Service and Business Assistance				\$ 124,901	\$ 139,560	\$ 14,659
26217	Develop Programs	Emissions Inventory Studies	Dev Emiss DB/Dev/Update Emiss	\$ 35,375	\$ 12,544	\$ (22,831)
26503	Develop Programs	PM Strategies	PM10 Plan/Analyze/Strategy Dev	87,553	60,926	(26,626)
26836	Develop Programs	Rule 2202 Support	R2202 Supt/CmptmtrMaint/WebSubmt	101,742	89,272	(12,470)
Sub-total Develop Programs				\$ 224,670	\$ 162,742	\$ (61,928)
26084	Develop Rules	Blk Carbon Stdy EPA	EPA Blck Carbon Climate Study	\$ 38,470	\$ -	\$ (38,470)
26165	Develop Rules	Conformity	Monitor Transp. Conformity	7,075	4,480	(2,595)
26460	Develop Rules	Regional Modeling	Rule Impact/Analyses/Model Dev	91,826	92,902	1,076
Sub-total Develop Rules				\$ 137,371	\$ 97,382	\$ (39,989)
08115	Ensure Compliance	Case Disposition	Trial/Dispo-Civil Case/Injunct	\$ 83,832	\$ 85,925	\$ 2,092
08380	Ensure Compliance	Interagency Coordination	Coordinate with Other Agencies	4,471	4,583	112
17365	Ensure Compliance	Hearing Board/Variations/Appeal	Attend/Record/Monitor HB Mtgs	47,977	56,515	8,539
26215	Ensure Compliance	Annual Emission Reporting	Annl Des/Impl/Emiss Monitor Sys	133,056	151,756	18,701
26645	Ensure Compliance	Rule 1610 Plan Verification	Rule 1610 Plan Verification	7,738	11,760	4,021
44500	Ensure Compliance	PM2.5 Program	Est/Operate/Maint PM2.5 Network	487,973	495,178	7,205
50375	Ensure Compliance	Inspections	Compliance/Inspection/Follow-up	1,539,933	-	(1,539,933)
50492	Ensure Compliance	Customer Service	Compliance/Inspection/Follow-up	-	4,416	4,416
50550	Ensure Compliance	Public Complaints/Breakdowns	Compltresp/Invflwup/Resolutn	163,091	-	(163,091)
60375	Ensure Compliance	Inspections	Compliance/Inspection/Follow-up	-	1,657,922	1,657,922
60550	Ensure Compliance	Public Complaints/Breakdowns	Compltresp/Invflwup/Resolutn	-	167,346	167,346
Sub-total Ensure Compliance				\$ 2,468,071	\$ 2,635,401	\$ 167,330

**APPENDIX C 4- COMPARISON OF EXPENDITURES BY REVENUE CATEGORIES: V FEDERAL GRANTS/OTHER FEDERAL REVENUE**

WP Code	Program Category	Project Description	Activities/Outputs	FY 2016-17 Adopted	FY 2017-18 Proposed	Increase/ (Decrease)
26445	Monitoring Air Quality	Meteorology	ModelDev/Data Analysis/Forecast	\$ 33,021	\$ 35,051	\$ 2,030
26530	Monitoring Air Quality	Photochemical Assessment	Photochemical Assessment	38,139	38,639	500
44063	Monitoring Air Quality	Ambient Air Analysis	Analyze Criteria/Tox/Pollutants	115,940	132,526	16,586
44064	Monitoring Air Quality	Ambient Network	Air Monitoring/Toxics Network	327,721	346,032	18,311
44065	Monitoring Air Quality	Air Quality Data Management	AM Audit/Validation/Reporting	20,939	21,248	309
44081	Monitoring Air Quality	Air Filtration EPA	Air Filtration EPA/Admn/Impl	52,348	31,873	(20,475)
44248	Monitoring Air Quality	EPA Community Scale AQ-SPEC	EPA Community Scale AQ-SPEC	16,751	16,999	247
44468	Monitoring Air Quality	NATTS(Natl Air Tox Trends Sta)	NATTS (Natl Air Tox Trends)	87,857	89,154	1,297
44469	Monitoring Air Quality	Near Roadway Mon	Near Roadway Monitoring	29,210	-	(29,210)
44505	Monitoring Air Quality	PM Sampling Program (EPA)	PM Sampling Program - Addition	2,219,552	2,252,324	32,772
44507	Monitoring Air Quality	PM Sampling Spec	PM Sampling Special Events	20,939	21,248	309
44530	Monitoring Air Quality	Photochemical Assessment	Photochemical Assess & Monitor	477,413	484,462	7,049
44585	Monitoring Air Quality	Quality Assurance	Quality Assurance Branch	50,254	55,796	5,542
Sub-total Monitoring Air Quality				\$ 3,490,084	\$ 3,525,352	\$ 35,268
35680	Timely Review of Permits	Small Business/Permit Streamln	Asst sm bus to comply/SCAQMD req	\$ 51,672	\$ 55,118	\$ 3,445
50475	Timely Review of Permits	NSR Implementation	Implement NSR/Allocate ERCs	40,773	44,160	3,387
Timely Review of Permits				\$ 92,445	\$ 99,277	\$ 6,832
Total Expenditures				\$ 6,723,899	\$ 6,848,824	\$ 124,925

**APPENDIX C 4- COMPARISON OF EXPENDITURES BY REVENUE CATEGORIES: VI SOURCE TEST/ANALYSIS FEES**

WP Code	Program Category	Project Description	Activities/Outputs	FY 2016-17 Adopted	FY 2017-18 Proposed	Increase/ (Decrease)
44701	Customer Service and Business Assistance	Source Testing/Customer Svc	Conduct ST/Prov Data/Cust Svc	\$ 10,470	\$ 10,624	\$ 155
44709	Customer Service and Business Assistance	VOC Sample Analysis/SBA/Other	VOC Analysis & Reptg/Cust Svc	104,696	106,242	1,546
Sub-total Customer Service and Business Assistance				\$ 115,165	\$ 116,866	\$ 1,700
44105	Ensure Compliance	CEMS Certification	CEMS Review/Approval	\$ 643,879	\$ 653,386	\$ 9,507
44175	Ensure Compliance	DB/Computerization	Develop Systems/Database	32,246	32,722	476
44450	Ensure Compliance	Microscopic Analysis	Asbestos/PM/Metals Analysis	418,783	424,967	6,183
44700	Ensure Compliance	Source Testing/Compliance	Conduct ST/Prov Data/Compl	501,131	508,088	6,956
44704	Ensure Compliance	ST/Sample Analysis/Compliance	Analyze ST Samples/Compliance	837,567	924,934	87,367
44795	Ensure Compliance	Toxics/Engineering	R1401 Toxics/HRA Prot/Rpt Eval	10,470	10,624	155
Sub-total Ensure Compliance				2,444,077	2,554,721	110,645
44546	Timely Review of Permits	Protocols/Reports/Plans	Eval Test Protocols/Compliance	128,776	130,677	1,901
Total Expenditures				\$ 2,688,018	\$ 2,802,264	\$ 114,247

**APPENDIX C 4- COMPARISON OF EXPENDITURES BY REVENUE CATEGORIES: VII HEARING BOARD FEES**

WP Code	Program Category	Project Description	Activities/Outputs	FY 2016-17 Adopted	FY 2017-18 Proposed	Increase/ (Decrease)
08115	Ensure Compliance	Case Disposition	Trial/Dispo-Civil Case/Injunct	\$ 69,860	\$ 71,604	\$ 1,744
17365	Ensure Compliance	Hearing Board/Variances/Appeal	Attend/Record/Monitor HB Mtgs	711,653	838,308	126,656
50365	Ensure Compliance	Hearing Bd/Variances	Variances/Orders of Abatement	305,795	165,599	(140,197)
60365	Ensure Compliance	Hearing Bd/Variances	Variances/Orders of Abatement	-	418,366	418,366
Sub-total Ensure Compliance				\$ 1,087,308	\$ 1,493,876	\$ 406,568
17024	Operational Support	Admin/SCAQMD/GB/HB Mgmt	Admin Governing/Hearing Brds	\$ 214,722	\$ 237,523	\$ 22,800
Total Expenditures				\$ 1,302,030	\$ 1,731,399	\$ 429,368



**APPENDIX C 4- COMPARISON OF EXPENDITURES BY REVENUE CATEGORIES: VIII CLEAN FUELS**

WP Code	Program Category	Project Description	Activities/Outputs	FY 2016-17 Adopted	FY 2017-18 Proposed	Increase/ (Decrease)
04130	Advance Clean Air Technology	Clean Fuels/Contract Admin	Clean Fuels Contract Admin/Monitor	\$ 29,140	\$ 31,810	\$ 2,670
08131	Advance Clean Air Technology	Clean Fuels/Legal Advice	Legal Advice: Clean Fuels	13,972	14,321	349
44012	Advance Clean Air Technology	AQMP/Control Tech Assessment	Tech Supp: Quantify Cost Effec	20,939	21,248	309
44039	Advance Clean Air Technology	Admin/Office Mgt/Tech Adv	Admin Support/Coordination	161,232	163,612	2,381
44048	Advance Clean Air Technology	Admin/Prog Mgmt/Tech Advance	Overall TA Program Mgmt/Coord	324,557	329,349	4,792
44095	Advance Clean Air Technology	CA Natural Gas Veh Partnership	CA Natural Gas Veh Partnership	10,470	10,624	155
44130	Advance Clean Air Technology	Clean Fuels/Contract Admin	Admin/Project Supp for TA Cont	1,375,703	722,444	(653,260)
44132	Advance Clean Air Technology	Clean Fuels/Mobile Sources	Dev/Impl Mobile Src Proj/Demo	910,854	2,559,900	1,649,047
44134	Advance Clean Air Technology	Clean Fuels/Stationary Combust	Dev/Demo Clean Combustion Tech	146,574	106,242	(40,332)
44135	Advance Clean Air Technology	Clean Fuels/Stationary Energy	Dev/Demo Alt Clean Energy	146,574	116,866	(29,708)
44136	Advance Clean Air Technology	Clean Fuels/Tech Transfer	Disseminate Low Emiss CF Tech	251,270	265,604	14,334
44453	Advance Clean Air Technology	Mob Src: Emiss Inven Method	Rvw CARB/US EPA emissions inven methodology	150,762	152,988	2,226
44677	Advance Clean Air Technology	School Bus/Lower Emission Prog	School Bus Program Oversight	146,574	148,738	2,164
44740	Advance Clean Air Technology	Tech Adv/Commercialization	Assess CFs/Adv Tech Potential	52,348	53,121	773
44741	Advance Clean Air Technology	Tech Adv/Non-Combustion	Dev/Demo Non-Combustion Tech	20,939	21,248	309
44816	Advance Clean Air Technology	Transportation Research	Transport Research/Adv Systems	104,696	106,242	1,546
Sub-total Advance Clean Air Technology				\$ 3,866,604	\$ 4,824,358	\$ 957,754
44458	Develop Programs	Mobile Source Strategies	Implement Fleet Rules	\$ 177,983	\$ 212,483	\$ 34,500
44456	Develop Rules	MS & AQMP Control Strategies	AQMP Control Strategies	\$ 62,818	\$ 63,745	\$ 928
44276	Policy Support	Advisory Group/Technology Adva	Tech Adv Advisory Group Supp	\$ 20,939	\$ 21,248	\$ 309
Total Expenditures				\$ 4,128,343	\$ 5,121,835	\$ 993,491

**APPENDIX C 4- COMPARISON OF EXPENDITURES BY REVENUE CATEGORIES: IX MOBILE SOURCES**

WP Code	Program Category	Project Description	Activities/Outputs	FY 2016-17 Adopted	FY 2017-18 Proposed	Increase/ (Decrease)
03455	Advance Clean Air Technology	Mobile Sources	Dev/Impl Mobile Source Strategies	\$ 33,153	\$ -	\$ (33,153)
04457	Advance Clean Air Technology	Mobile Source/Moyer Adm	Carl Moyer: Contract/Fin Admin	198,152	216,308	18,156
04003	Advance Clean Air Technology	AB2766/MSRC	MSRC Program Administration	67,993	74,223	6,230
04542	Advance Clean Air Technology	Prop 1B:Goods Movement	Contracts/Finance Admin	97,133	106,034	8,900
04544	Advance Clean Air Technology	Prop 1B:Low Emiss Sch Bus	Grants/Finance Admin	9,713	10,603	890
08001	Advance Clean Air Technology	AB2766/Mob Src/Legal Advice	AB2766 Leg Adv: Trans/Mob Source	13,972	14,321	349
08003	Advance Clean Air Technology	AB2766/MSRC	Legal Advice: MSRC Prog Admin	41,916	42,962	1,046
08457	Advance Clean Air Technology	Mob Src/C Moyer/Leg Advice	Moyer/Implem/Program Dev	27,944	28,642	697
16457	Advance Clean Air Technology	MS/Carl Moyer Admin	C Moyer/Contractor Compliance	124,297	25,293	(99,004)
16542	Advance Clean Air Technology	Prop 1B:Goods Movement	Prop 1B: Goods Movement	124,297	25,293	(99,004)
44003	Advance Clean Air Technology	AB2766/MSRC	Mob Src Review Comm Prog Admin	104,696	106,242	1,546
44004	Advance Clean Air Technology	AB2766/MSRC/Contract Admin	AB2766 Admin Discretionary Prog	628,175	637,450	9,275
44066	Advance Clean Air Technology	AQIP Marine SCR DPF	AQIP Marine SCR DPF/Admin/Impl	31,409	31,873	464
44453	Advance Clean Air Technology	Mob Src: Emiss Inven Method	Rvw CARB/US EPA emissions inven methodology	163,325	165,737	2,412
44457	Advance Clean Air Technology	Mob Src/C Moyer Adm/Outreach	Carl Moyer: Impl/Admin Grant	1,844,741	2,444,190	599,449
44459	Advance Clean Air Technology	Mob Src/C Moyer/Impl/Prg Dev	Moyer/Implem/Program Dev	586,297	594,954	8,657
44460	Advance Clean Air Technology	VIP Admin	VIP Admin/Outreach/Impl	167,513	169,987	2,473
Sub-total Advance Clean Air Technology				\$ 4,264,727	\$ 4,694,111	\$ 429,384
04002	Customer Service and Business Assistance	AB2766/Mobile Source	Prog Admin: Monitor/Dist/Audit	\$ 29,427	\$ 21,207	\$ (8,220)
08404	Customer Service and Business Assistance	Legal Rep/Legislation	Draft Legis/SCAQMD Position/Mtgs	4,192	21,481	17,290
26007	Customer Service and Business Assistance	AB2766/MSRC	AB2766 Prov Tech Asst to Cities	243,202	273,273	30,071
35126	Customer Service and Business Assistance	Clean Air Connections	Coord of region-wide community group	167,880	179,074	11,194
35205	Customer Service and Business Assistance	Environmental Education	Curriculum Dev/Project Coord	27,253	29,070	1,817
35390	Customer Service and Business Assistance	Intergov/Geographic Deployment	Dev/Impl Local Govt Outreach	1,624,121	1,730,465	106,344
35492	Customer Service and Business Assistance	Public Education/Public Events	Pub Events/Conf/Rideshare Fair	483,580	494,774	11,194
35555	Customer Service and Business Assistance	Public Information Center	Inform public of unhealthy air	237,180	248,374	11,194
60492	Customer Service and Business Assistance	Outreach/Business	Pub Events/Conf/Rideshare Fair	-	41,837	41,837
Sub-total Customer Service and Business Assistance				\$ 2,816,835	\$ 3,039,555	\$ 222,720

**APPENDIX C 4- COMPARISON OF EXPENDITURES BY REVENUE CATEGORIES: IX MOBILE SOURCES**

WP Code	Program Category	Project Description	Activities/Outputs	FY 2016-17 Adopted	FY 2017-18 Proposed	Increase/ (Decrease)
03010	Develop Programs	AQMP	Develop/Implement AQMP	\$ 6,631	\$ 8,944	\$ 2,313
08010	Develop Programs	AQMP	AQMP Revision/CEQA Review	22,355	22,913	558
26002	Develop Programs	AB2766/Mobile Source	AB2766 Mobile Source Outreach	198,984	232,954	33,971
26010	Develop Programs	AQMP	AQMP Special Studies	225,093	227,994	2,901
26068	Develop Programs	SCAQMD Projects	Prepare Environmental Assessments	383,768	329,133	(54,635)
26102	Develop Programs	CEQA Document Projects	Review/Prepare CEQA Comments	574,842	509,587	(65,254)
26104	Develop Programs	CEQA Policy Development	ID/Develop/Impl CEQA Policy	104,492	139,397	34,905
26128	Develop Programs	Cln Communities Pln	Cln Communities Plan Admn/Impl	22,109	27,999	5,890
26217	Develop Programs	Emissions Inventory Studies	Dev Emiss DB/Dev/Update Emiss	44,219	15,680	(28,539)
26218	Develop Programs	AQMP/Emissions Inventory	Dev Emiss Inv: Forecasts/RFPs	86,226	87,358	1,132
26451	Develop Programs	Mob Src/CARB/EPA Monitoring	CARB/US EPA Mob Src Fuel Policies	-	335,992	335,992
26452	Develop Programs	Mob Src/CEC/US DOE Monitoring	CEC/US DOE Mob Src rulemaking proposals	-	111,997	111,997
26745	Develop Programs	Rideshare	Dist Rideshare/Telecommute Prog	232,148	136,637	(95,511)
26816	Develop Programs	Transportation Regional Progs	Dev AQMP Meas/Coord w/Reg Agn	221,093	78,398	(142,695)
35560	Develop Programs	Public Notification	Public notif of rules/hearings	51,605	54,513	2,908
44069	Develop Programs	AQIP Evaluation	AQIP Contract Admin/Evaluation	136,105	138,114	2,010
44451	Develop Programs	Mob Src/CARB/EPA Monitoring	CARB/US EPA Mob Src Fuel Policies	314,087	-	(314,087)
44452	Develop Programs	Mob Src/CEC/US DOE Monitoring	CEC/US DOE Mob Src rulemaking proposals	104,696	-	(104,696)
44542	Develop Programs	Prop 1B:Goods Movement	Prop 1B:Goods Movement	2,066,696	2,361,089	294,393
Sub-total Develop Programs				\$ 4,795,149	\$ 4,818,700	\$ 23,551
03650	Develop Rules	Rules	Develop & Implement Rules	\$ 663	\$ -	\$ (663)
26077	Develop Rules	Area Sources/Rulemaking	Dev/Eval/Impl Area Source Prog	44,219	45,919	1,700
26165	Develop Rules	Conformity	Monitor Transp. Conformity	81,362	51,519	(29,844)
26362	Develop Rules	Health Effects	Study Health Effect/Toxicology	323,459	388,070	64,611
26385	Develop Rules	Criteria Pollutants/Mob Srcs	Dev/Impl Intercredit Trading	149,238	151,196	1,958
26449	Develop Rules	Mob Src/SCAQMD Rulemaking	Prepare SCAQMD Mob Src rulemaking proposals	-	181,436	181,436
26460	Develop Rules	Regional Modeling	Rule Impact/Analyses/Model Dev	1,010,081	1,021,921	11,841
44449	Develop Rules	Mob Src/SCAQMD Rulemaking	Prepare SCAQMD Mob Src rulemaking proposals	418,783	-	(418,783)
Sub-total Develop Rules				\$ 2,027,805	\$ 1,840,061	\$ 231,703

**APPENDIX C 4- COMPARISON OF EXPENDITURES BY REVENUE CATEGORIES: IX MOBILE SOURCES**

WP Code	Program Category	Project Description	Activities/Outputs	FY 2016-17 Adopted	FY 2017-18 Proposed	Increase/ (Decrease)
26076	Ensure Compliance	Area Sources/Compliance	Area Source Compliance	\$ 577,733	\$ 578,887	\$ 1,154
26716	Ensure Compliance	Spec Monitoring/R403	Rule 403 Compliance Monitoring	178,754	-	(178,754)
26645	Ensure Compliance	Rule 1610 Plan Verification	Rule 1610 Plan Verification	102,808	156,236	53,428
35111	Ensure Compliance	Call Center/CUT SMOG	Smoking Vehicle Complaints	1,622,114	1,730,275	108,161
44500	Ensure Compliance	PM2.5 Program	Est/Operate/Maint PM2.5 Network	1,452,094	1,473,534	21,441
44716	Ensure Compliance	Special Monitoring	Rule 403 Compliance Monitoring	381,659	386,897	5,237
50240	Ensure Compliance	Environmental Justice	R461/Combustion Equip Testing	-	85,007	85,007
50492	Ensure Compliance	Customer Service	Compliance/Inspection/Follow-up	-	85,007	85,007
50538	Ensure Compliance	Port Comm AQ Enforcement	Port Comm AQ Enforcement	101,932	-	(101,932)
50542	Ensure Compliance	Prop 1B:Goods Movement	Prop 1B: Gds Mvmnt/Inspect	61,159	-	(61,159)
50850	Ensure Compliance	VEE Trains	Smoking Trains-Compl/Inspec/FU	93,777	-	(93,777)
Sub-total Ensure Compliance				\$ 4,572,030	\$ 4,495,844	\$ 180,683
26061	Monitoring Air Quality	Air Quality Evaluation	Air Quality Evaluation	\$ 232,148	\$ 503,988	\$ 271,840
26443	Monitoring Air Quality	MATES V		-	90,243	90,243
26445	Monitoring Air Quality	Meteorology	ModelDev/Data Analysis/Forecast	423,769	449,825	26,056
44063	Monitoring Air Quality	Ambient Air Analysis	Analyze Criteria/Tox/Pollutants	1,275,342	1,457,785	182,443
44064	Monitoring Air Quality	Ambient Network	Air Monitoring/Toxics Network	3,154,314	3,330,555	176,241
44065	Monitoring Air Quality	Air Quality Data Management	AM Audit/Validation/Reporting	161,232	163,612	2,381
44240	Monitoring Air Quality	Environmental Justice	Implement Environmental Justice	72,554	73,625	1,071
44468	Monitoring Air Quality	NATTS(Natl Air Tox Trends Sta)	NATTS (Natl Air Tox Trends)	204,245	207,261	3,016
44469	Monitoring Air Quality	Near Roadway Mon	Near Roadway Monitoring	238,392	242,869	4,476
44530	Monitoring Air Quality	Photochemical Assessment	Photochemical Assess & Monitor	150,762	152,988	2,226
44585	Monitoring Air Quality	Quality Assurance	Quality Assurance Branch	483,695	537,037	53,342
Sub-total Monitoring Air Quality				\$ 6,396,452	\$ 7,209,787	\$ 813,334

**APPENDIX C 4- COMPARISON OF EXPENDITURES BY REVENUE CATEGORIES: IX MOBILE SOURCES**

WP Code	Program Category	Project Description	Activities/Outputs	FY 2016-17 Adopted	FY 2017-18 Proposed	Increase/ (Decrease)
04447	Operational Support	Mobile Sources/Accounting	Record Acct Rec & Pay/Special Funds	\$ 126,273	\$ 137,844	\$ 11,570
08102	Operational Support	CEQA Document Projects	CEQA Review	55,888	28,642	(27,247)
Sub-total Operational Support				\$ 182,162	\$ 166,485	\$ (15,676)
20494	Policy Support	Outreach/Media	Edits,Brds,Talk shows,Commercl	\$ 205,470	\$ -	\$ (205,470)
26240	Policy Support	EJ-AQ Guidance Document	AQ Guidance Document	68,097	8,624	(59,473)
26277	Policy Support	Advisory Group/AQMP	Governing Board AQMP Advisory Group	8,512	8,624	112
26278	Policy Support	Advisory Group/Sci,Tech,Model	Scientific/Tech/Model Peer Rev	195,778	25,871	(169,907)
35280	Policy Support	Advisory Group/Ethnic Comm	GB Ethnic Comm Advisory Group	67,152	71,630	4,478
35281	Policy Support	Advisory Group/Small Business	SBA Advisory Group Staff Support	16,352	17,442	1,090
35345	Policy Support	Goods Mvmt&Financial Incentive	Goods Movement & Financial Incentives Progr	218,026	232,564	14,538
35414	Policy Support	Legislation-Effects	Lobbying/Analyses/Tracking/Out	92,210	98,026	5,815
44410	Policy Support	Legislation	Support Pollution Reduction thru Legislatio	104,696	106,242	1,546
50148	Policy Support	Climate Change	GHG/Climate Change Support	50,966	55,200	4,234
60148	Policy Support	Climate Change	GHG/Climate Chg Support	-	10,459	10,459
Sub-total Policy Support				\$ 1,027,259	\$ 634,681	\$ (187,108)
Total Expenditures				\$26,082,418	\$ 26,899,224	\$ 1,698,591

**APPENDIX C 4- COMPARISON OF EXPENDITURES BY REVENUE CATEGORIES: X AB 2588 AIR TOXICS “HOT SPOT” FEES**

<b>WP Code</b>	<b>Program Category</b>	<b>Project Description</b>	<b>Activities/Outputs</b>	<b>FY 2016-17 Adopted</b>	<b>FY 2017-18 Proposed</b>	<b>Increase/ (Decrease)</b>
35791	Customer Service and Business Assistance	Toxics/AB2588	Outreach/AB 2588 Air Toxics	\$ 2,180	\$ 2,326	\$ 145
04791	Ensure Compliance	Toxics/AB2588	AB2588 Toxics HS Fee Collection	\$ 44,140	\$ 46,810	\$ 2,670
08791	Ensure Compliance	Toxics/AB2588	AB2588 Legal Advice: Plan & Impl	13,972	14,321	349
26794	Ensure Compliance	Toxics/AB2588	AB2588 Core, Tracking, IWS	2,078,274	2,911,928	833,654
27791	Ensure Compliance	Toxics/AB2588	AB2588 Database Software Supp	173,776	177,384	3,607
44794	Ensure Compliance	Toxics/AB2588	Eval Protocols/Methods/ST	261,740	903,054	641,315
50791	Ensure Compliance	Toxics/AB2588	AB2588 Rev Rprts/Risk Redplans	50,966	55,200	4,234
60791	Ensure Compliance	Toxics/AB2588	Risk Reduct Plan Rvw/Comm Mtgs	-	20,918	20,918
Sub-total Ensure Compliance				\$ 2,622,868	\$ 4,129,615	\$ 1,506,746
Total Expenditures				\$ 2,625,048	\$ 4,131,940	\$ 1,506,892

**APPENDIX C 4- COMPARISON OF EXPENDITURES BY REVENUE CATEGORIES: XI TRANSPORTATION PROGRAMS**

WP Code	Program Category	Project Description	Activities/Outputs	FY 2016-17 Adopted	FY 2017-18 Proposed	Increase/ (Decrease)
04631	Customer Service and Business Assistance	Cash Mgmt/Refunds	Research/Doc/Prep/Proc Refunds	\$ 5,828	\$ 6,362	\$ 534
26833	Customer Service and Business Assistance	Rule 2202 ETC Training	Rule 2202 ETC Training	312,421	233,315	(79,106)
Sub-total Customer Service and Business Assistance				\$ 318,249	\$ 239,677	\$ (78,572)
26834	Develop Programs	Rule 2202 Implement	Rule 2202 Proc/Sub Plans/Tech Eval	\$ 751,716	\$ 571,186	\$ (180,530)
26836	Develop Programs	Rule 2202 Support	R2202 Supt/CmptrMaint/WebSubmt	576,537	505,874	(70,663)
Sub-total Develop Programs				\$ 1,328,253	\$ 1,077,060	\$ (251,194)
04630	Operational Support	Cash Mgmt/Revenue Receiving	Receive/Post Pymts/Reconcile	\$ 101,990	\$ 111,335	\$ 9,345
Total Expenditures				\$ 1,748,492	\$ 1,428,072	\$ (320,421)

**APPENDIX C 4- COMPARISON OF EXPENDITURES BY REVENUE CATEGORIES: XV CARB SUBVENTION**

WP Code	Program Category	Project Description	Activities/Outputs	FY 2016-17 Adopted	FY 2017-18 Proposed	Increase/ (Decrease)
04260	Customer Service and Business Assistance	Fee Review	Cmte Mtg/Fee-Related Complaint	\$ 1,166	\$ 1,272	\$ 107
35205	Customer Service and Business Assistance	Environmental Education	Curriculum Dev/Project Coord	3,270	3,488	218
35260	Customer Service and Business Assistance	Fee Review	Cmte Mtg/Fee-Related Complaint	5,451	5,814	363
35381	Customer Service and Business Assistance	Interagency Liaison	Interact Gov Agns/Promote SCAQMD	981	1,047	65
35492	Customer Service and Business Assistance	Public Education/Public Events	Pub Events/Conf/Rideshare Fair	25,121	25,703	582
50690	Customer Service and Business Assistance	Source Education	Prov Tech Asst To Industries	39,957	43,276	3,319
60690	Customer Service and Business Assistance	Source Education	Prov Tech Asst To Industries	-	5,857	5,857
Sub-total Customer Service and Business Assistance				\$ 75,946	\$ 86,458	\$ 10,512
26010	Develop Programs	AQMP	AQMP Special Studies	\$ 27,011	\$ 27,359	\$ 348
26217	Develop Programs	Emissions Inventory Studies	Dev Emiss DB/Dev/Update Emiss	35,375	12,544	(22,831)
26503	Develop Programs	PM Strategies	PM10 Plan/Analyze/Strategy Dev	76,609	53,311	(23,298)
Sub-total Develop Programs				\$ 138,995	\$ 93,214	\$ (45,781)
26656	Develop Rules	Rulemaking/VOC	Dev/Amend VOC Rules	56,930	92,874	35,944
44708	Develop Rules	VOC Sample Analysis/Rules	VOC Analysis & Rptg/Rules	2,094	2,125	31
50650	Develop Rules	Rulemaking	Dev/Amend/Impl Rules	11,212	6,072	(5,141)
Sub-total Develop Rules				\$ 70,236	\$ 101,071	\$ 30,835
08115	Ensure Compliance	Case Disposition	Trial/Dispo-Civil Case/Injunct	\$ 69,860	\$ 71,604	\$ 1,744
26076	Ensure Compliance	Area Sources/Compliance	Area Source Compliance	80,883	81,044	162
26716	Ensure Compliance	Spec Monitoring/R403	Rule 403 Compliance Monitoring	16,250	-	(16,250)
35111	Ensure Compliance	Call Center/CUT SMOG	Smoking Vehicle Complaints	122,095	130,236	8,141
44707	Ensure Compliance	VOC Sample Analysis/Compliance	VOC Analysis & Rptg/Compliance	105,192	106,707	1,515
44716	Ensure Compliance	Special Monitoring	Rule 403 Compliance Monitoring	34,696	35,172	476
50492	Ensure Compliance	Customer Service	Compliance/Inspection/Follow-up	-	4,416	4,416
50375	Ensure Compliance	Inspections	Compliance/Inspection/Follow-up	1,273,759	-	(1,273,759)
50550	Ensure Compliance	Public Complaints/Breakdowns	Compltresp/Invflwup/Resolutn	142,704	-	(142,704)
50850	Ensure Compliance	VEE Trains	Smoking Trains-Compl/Inspec/FU	8,155	-	(8,155)
60375	Ensure Compliance	Inspections	Compliance/Inspection/Follow-up	-	1,371,354	1,371,354
60550	Ensure Compliance	Public Complaints/Breakdowns	Compltresp/Invflwup/Resolutn	-	146,428	146,428
Sub-total Ensure Compliance				\$ 1,853,594	\$ 1,946,961	\$ 93,367



**APPENDIX C 4- COMPARISON OF EXPENDITURES BY REVENUE CATEGORIES: XV CARB SUBVENTION**

WP Code	Program Category	Project Description	Activities/Outputs	FY 2016-17 Adopted	FY 2017-18 Proposed	Increase/ (Decrease)
50210	Monitoring Air Quality	Emergency Response	Emerg Tech Asst to Public Saf	\$ 1,528.98	\$ -	\$(1,528.98)
60210	Monitoring Air Quality	Emergency Response	Emerg Tech Asst to Public Saf	-	628	628
Sub-total Monitoring Air Quality				\$ 1,529	\$ 628	\$ (901.43)
17024	Operational Support	Admin/SCAQMD/GB/HB Mgmt	Admin Governing/Hearing Brds	\$ 27,218	\$ 30,108	\$ 2,890
35680	Timely Review of Permits	Small Business/Permit Streamln	Asst sm bus to comply/SCAQMD req	\$ 51,672	\$ 55,118	\$ 3,445
50518	Timely Review of Permits	RECLAIM Non-Title V	Process RECLAIM Only Permits	64,217	69,551	5,334
Sub-total Timely Review of Permits				\$ 115,889	\$ 124,669	\$ 8,780
Total Expenditures				\$2,283,407	\$2,383,108	\$ 99,701

**APPENDIX C 4- COMPARISON OF EXPENDITURES BY REVENUE CATEGORIES: XVII OTHER REVENUE**

WP Code	Program Category	Project Description	Activities/Outputs	FY 2016-17 Adopted	FY 2017-18 Proposed	Increase/ (Decrease)
26738	Advance Clean Air Technology	Target Air Shed EPA	Targeted Air Shed Admin/Impl	\$ 55,273	\$ 55,999	\$ 725
44188	Advance Clean Air Technology	DERA FY 13 Veh Repl	DERA Vehicle Repl Admin/Impl	41,878	42,497	618
44203	Advance Clean Air Technology	EFMP Program Support		-	252,855	252,855
44356	Advance Clean Air Technology	GGRF ZEDT Demo	GGRF ZEDT Demo Admin	230,331	233,732	3,401
44361	Advance Clean Air Technology	HD Trucks DOE ARRA	DOE HD Trucks Admin (ARRA)	418,783	424,967	6,183
44533	Advance Clean Air Technology	POLB AMECS Demo	POLB AMECS Demo-Admin/Impl	98,414	99,867	1,453
44738	Advance Clean Air Technology	Target Air Shed EPA	Targeted Air Shed Admin/Impl	31,409	31,873	464
Sub-total Advance Clean Air Technology				\$ 876,089	\$ 1,141,789	\$ 265,700
04009	Develop Programs	AB 1318 Mitigation	AB 1318 Projects Admn/Impl	\$ 25,255	\$ 27,569	\$ 2,314
08009	Develop Programs	AB 1318 Mitigation	AB 1318 Projects Admn/Impl	13,972	14,321	349
26009	Develop Programs	AB 1318 Mitigation	AB 1318 Projects Admn/Impl	55,273	67,198	11,925
26448	Develop Programs	Mobile Src Strategies-Off Road	CARB Off-Road Mob Src ctrl strategy for SIP	-	223,994	223,994
26452	Develop Programs	Mob Src/CEC/US DOE Monitoring	CEC/US DOE Mob Src rulemaking proposals	-	111,997	111,997
44009	Develop Programs	AB 1318 Mitigation	AB 1318 Projects Admn/Impl	157,044	159,363	2,319
44396	Develop Programs	Lawnmower Exchange	Lawn Mower Admin/Impl/Outreach	62,818	63,745	928
44448	Develop Programs	Mobile Src Strategies-Off Road	CARB Off-Road Mob Src ctrl strategy for SIP	31,409	-	(31,409)
44452	Develop Programs	Mob Src/CEC/US DOE Monitoring	CEC/US DOE Mob Src rulemaking proposals	104,696	-	(104,696)
Sub-total Develop Programs				\$ 450,466	\$ 668,187	\$ 217,721
26084	Develop Rules	Blk Carbon Std EPA	EPA Blk Carbon Climate Study	\$ 5,748	\$ -	\$ (5,748)
60539	Ensure Compliance	Procedure 5 Review	Evaluate Proc 5 Asbestos Plans		\$ 83,673	\$ 83,673
44079	Monitoring Air Quality	AQ SPEC	AQ SPEC	\$ 628,175	\$ 637,450	\$ 9,275
44082	Monitoring Air Quality	Air Filtration Other	Air Filtration Other/Admn/Impl	52,348	31,873	(20,475)
44084	Monitoring Air Quality	Blk Carbon Std EPA	EPA Blk Carbon Climate Study	-	42,497	42,497
44248	Monitoring Air Quality	EPA Community Scale AQ-SPEC		192,640	195,485	2,844
44663	Monitoring Air Quality	Salton Sea Monit	Mon/Analyze Hydrogen Sulfide	52,348	53,121	773
44821	Monitoring Air Quality	TraPac Air Filt Prg	Admin/Tech Suppt/Reptg/Monitor	31,409	212,483	181,075
Sub-total Monitoring Air Quality				\$ 956,920	\$ 1,172,908	\$ 215,989
27215	Operational Support	Annual Emission Reporting	System Enhancements for GHG	\$ 17,726	\$ 18,268	\$ 541
26454	Policy Support	Mob Src:Greenhs Gas Reduc Mea	Provide comments on mob src portion of AB32	\$ -	\$ 199,355	\$ 199,355
44454	Policy Support	Mob Src:Greenhs Gas Reduc Mea	Provide comments on mob src portion of AB32	186,359	-	(186,359)
Sub-total Policy Support				\$ 186,359	\$ 199,355	\$ 12,996
Total Expenditures				\$ 2,493,308	\$ 3,284,180	\$ 790,872

**APPENDIX C 4- COMPARISON OF EXPENDITURES BY REVENUE CATEGORIES: XVIII AREA SOURCES**

<b>WP Code</b>	<b>Program Category</b>	<b>Project Description</b>	<b>Activities/Outputs</b>	<b>FY 2016-17 Adopted</b>	<b>FY 2017-18 Proposed</b>	<b>Increase/ (Decrease)</b>
26071	Develop Rules	Arch Ctgs - Admin	Rdev/Aud/DB/TA/SCAQMD/Rpts/AER	\$ 221,093	\$ 246,394	\$ 25,301
08072	Ensure Compliance	Arch Ctgs - End User	Case Dispo/Rvw, Track, Prep NOV's	\$ 13,972	\$ 14,321	\$ 349
08073	Ensure Compliance	Arch Ctgs - Other	Case Dispo/Rvw, Track, Prep NOV's	13,972.05	14,320.75	349
26072	Ensure Compliance	Arch Ctgs - End User	Compliance/Rpts/Rule Implementation	221,093.01	179,195.56	(41,897)
26073	Ensure Compliance	Arch Ctgs - Other	Compliance/Rpts/Rule Implementation	221,093.01	179,195.56	(41,897)
44072	Ensure Compliance	Arch Ctgs - End User	Sample Analysis/Rpts	1,046,958.32	424,966.82	(621,992)
50071	Ensure Compliance	Arch Ctgs - Admin	Report Review	20,386.35	-	(20,386)
50072	Ensure Compliance	Arch Ctgs - End User	Compliance/Rpts/Rule Impmenta	20,386.35	-	(20,386)
50073	Ensure Compliance	Arch Ctgs - Other	Compliance/Rpts/Rule Implementation	917,385.64	-	(917,386)
Sub-total Ensure Compliance				\$ 2,475,247	\$ 811,999	\$ (1,663,247)
44073	Monitoring Air Quality	Arch Ctgs - Other	Sample Analysis/Rpts	\$ 418,783	\$ 424,967	\$ 6,183
04071	Operational Support	Arch Ctgs - Admin	Cost Analysis/Payments	\$ 7,771	\$ 8,483	\$ 712
08071	Operational Support	Arch Ctgs - Admin	Rule Dev/TA/Reinterpretations	13,972.05	14,320.75	349
27071	Operational Support	Arch Ctgs - Admin	Database Dev/Maintenance	59,088.21	60,891.83	1,804
Sub-total Operational Support				\$ 80,831	\$ 83,695	\$ 2,864
Total Expenditures				\$ 3,195,954	\$ 1,567,055	\$ (1,628,899)

**APPENDIX C 4- COMPARISON OF EXPENDITURES BY REVENUE CATEGORIES: XIX PORTABLE EQUIPMENT****REGISTRATION PROGRAM (PERP)**

<b>WP Code</b>	<b>Program Category</b>	<b>Project Description</b>	<b>Activities/Outputs</b>	<b>FY 2016-17 Adopted</b>	<b>FY 2017-18 Proposed</b>	<b>Increase/ (Decrease)</b>
50070	Ensure Compliance	CARB PERP Program	CARB Audits/Statewide Equip Reg	\$ 1,427,044	\$ -	\$ 1,427,044
60070	Ensure Compliance	CARB PERP Program	CARB Audits/Statewide Equip Reg	-	1,045,914	(1,045,914)
Sub-total Ensure Compliance				\$ 1,427,044	\$ 1,045,914	\$ 381,130
Total Expenditures				\$ 1,427,044	\$ 1,045,914	\$ 381,130

# ATTACHMENT I

## SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

### **Final Socioeconomic Assessment for Automatic Consumer Price Index (CPI) Increase**

March 2017

#### **Executive Officer**

Wayne Nastri

#### **Deputy Executive Officer**

##### **Planning, Rule Development & Area Sources**

Philip M. Fine, Ph.D.

#### **Assistant Deputy Executive Officer**

##### **Planning, Rule Development & Area Sources**

Susan Nakamura

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**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
GOVERNING BOARD**

Chairman: DR. WILLIAM A. BURKE  
Speaker of the Assembly Appointee

Vice Chairman: BEN BENOIT  
Mayor Pro Tem, Wildomar  
Cities of Riverside County

**MEMBERS:**

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Supervisor, Fifth District  
County of Riverside

JOE BUSCAINO  
Councilmember, 15<sup>th</sup> District  
City of Los Angeles Representative

MICHAEL A. CACCIOTTI  
Mayor, South Pasadena  
Cities of Los Angeles County/Eastern Region

JOSEPH K. LYOU, Ph. D.  
Governor's Appointee

SHEILA KUEHL  
Supervisor, Third District  
County of Los Angeles

LARRY MCCALLON  
Mayor Pro Tem, Highland  
Cities of San Bernardino County

JUDITH MITCHELL  
Councilmember, Rolling Hills Estates  
Cities of Los Angeles County/Western Region

SHAWN NELSON  
Supervisor, Fourth District  
County of Orange

DR. CLARK E. PARKER, SR.  
Senate Rules Committee Appointee

DWIGHT ROBINSON  
Councilmember, Lake Forest  
Cities of Orange County

JANICE RUTHERFORD  
Supervisor, Second District  
County of San Bernardino

**EXECUTIVE OFFICER:**

WAYNE NASTRI

## EXECUTIVE SUMMARY

Rule 320 – Automatic Adjustment Based on Consumer Price Index (CPI) for Regulation III Fees requires adjustments of most fee rates in Regulation III by the California CPI annually unless the Governing Board votes to amend the rule to not require the CPI increase or requires a different increase for a given year. The October 29, 2010 SCAQMD Governing Board Resolution requires, by March 15, an assessment of the increase in fee rates based on the previous year’s CPI. A socioeconomic analysis was conducted to assess the impacts of such adjustment.<sup>1</sup> In addition, the analysis provides background information, historical trends of SCAQMD revenues from various fees and sectoral distributions of these fees. A summary of the analysis and findings is presented below.

<b>Fee Increases</b>	Pursuant to Rule 320, an across-the-board 2.5-percent increase in fee rates (equivalent to the change in the California CPI from December 2015 to December 2016) will occur on July 1, 2017 unless the Governing Board decides to forego the 2.5-percent increase.
<b>Affected Facilities</b>	Nearly all the facilities regulated by the SCAQMD would be affected by the proposed fee increases. These facilities belong to every sector of the economy.
<b>Approach and Findings</b>	<p>The analysis herein initially examines the impact of the existing Regulation III fees on various industries. The fees examined include emissions fees, permit processing fees, annual permit renewal fees, toxic hot spot fees, source testing fees, and a portion of fees under Rule 2202 – On-Road Motor Vehicle Mitigation Options. The current fee rates together with the most recent equipment and activity profiles of individual facilities were used to generate facility level fee estimates. These estimates were then aggregated to the industry level.</p> <p>The manufacturing sector is the largest contributor to the SCAQMD emission fees (65 percent), permit processing fees (44 percent), and annual permit renewal fees (36 percent). Overall, the costs of complying with the current Regulation III rates are very small relative to the region-wide industry output or value-added (less than 0.01 percent).</p>
<b>Impact of Fee Increase</b>	Based on the fee categories examined in the analysis and last year’s activity levels, the across-the-board CPI-based fee rate increase <i>per se</i> is projected to bring additional revenue totaling \$2.03 million to the SCAQMD. The manufacturing sector as a whole would experience the largest increase in fees (approximately \$0.88 million for about 4,000 facilities), followed by the services sector (approximately \$0.38 million for about 11,000 facilities) and the retail trade sector (approximately \$0.26 million for about 4,000 facilities). Within the manufacturing sector, the petroleum and coal products manufacturing industry, mostly comprised of refineries, will experience an increase of approximately \$0.37 million.

<sup>1</sup> A socioeconomic assessment of the proposed increase in Title V and non-Title V permit-related fees for facilities is included in the Draft Socioeconomic Assessment for Proposed Amended Regulation (PAR) III – Fees.

## INTRODUCTION

The SCAQMD General Fund is comprised of revenues from a number of sources. The majority of SCAQMD revenues are derived from emission fees, annual renewal fees, permit processing fees, and a portion of vehicle registration fees collected by the state (mobile sources/clean fuels). Other sources of revenues include Hearing Board fees, source test/analysis fees, transportation program (Rule 2202) fees, reimbursement for work associated with the AB 2588 program (toxic hot spot program), civil penalties/settlements, and other revenues.

Pursuant to Rule 320, an across-the-board 2.5-percent increase in fee rates (equivalent to the change in the California Consumer Price Index (CPI) from December 2015 to December 2016) will occur on July 1, 2017 unless the Governing Board decides to forgo the 2.5-percent increase. For the past five years, the annual increase in fee rates mirroring the CPI were as follows: 2.4% in 2012-2013, 2.0% in 2013-2014, 1.6% in 2014-2015, 1.4% in 2015-2016, and 2.4% in 2016-17.

To examine the impact of a fee rate increase on various industry sectors, this report focuses the analysis on emission fees, permit processing fees, annual permit renewal fees, toxic hot spot fees, source test fees, and a portion of Rule 2202 fees.<sup>2</sup> Other fees that are also subject to the automatic CPI increase are area source fees and Hearing Board fees; however, they account for a relatively small portion of the total revenue.

## REVENUE TREND

Table 1 lists historical revenue for two prior fiscal years<sup>3</sup> (FY), estimated revenue for the current FY 2016-2017, and projected revenue for FY 2017-2018, by major fee category. Estimated revenue for FY 2016-2017 is based on actual revenue received through February 2017. FY 2017-2018 projected revenue is based on forecasts received from each office. Emission fees, permit processing fees, and annual permit renewal fees together represented approximately 61 percent of the SCAQMD's estimated total FY 2016-2017 revenues.

Compared to the estimated revenue in FY 2016-2017, a net total revenue increase of \$2.5 million is projected for FY 2017-2018, which reflects both the impact of the across-the-board CPI-based fee rate increase and the forecast changes in activity level. Most revenue categories are increasing with the exception of decreases relating to anticipated workload changes in Hearing Board cases and Transportation Programs; additionally, a projected decrease in one-time transfers from Special Revenue Funds is causing a decrease in the Other Revenue category not subject to CPI.

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<sup>2</sup> Employers that are subject to Rule 2202 can choose among various compliance options, including participation in the Air Quality Investment Program (AQIP). The AQIP program fees consist of a registration fee and an investment fee, the latter of which goes to a special revenue account to obtain necessary emissions reduction or air quality benefits and is not part of the General Fund.

<sup>3</sup> A fiscal year runs from July 1 to June 30. For example, FY 2016-2017 refers to the period of July 1, 2016 to June 30, 2017. In comparison, calendar year (CY) 2017 refers to the period of January 1 to December 31, 2017.



**Table 1: Actual and Estimated SCAQMD Revenue**

Revenue Category	FY 2014-15 Actual* (Thousands)	FY 2015-16 Actual* (Thousands)	FY 2016- 2017 Estimated** (Thousands)	FY 2017- 2018 Projected (Thousands)	% Change in Fee Rates	Changes in Revenue (from FY 2016-2017 Estimated)	
						Thousands	%
Emission Fees	\$19,839	\$18,985	\$17,549	\$19,481	2.5%	\$1,931	11.0%
Annual Renewal Fees (w/o PERP)	\$44,700	\$46,380	\$48,453	\$50,306	2.5%	\$1,854	3.8%
Permit Processing Fees	\$16,668	\$17,240	\$18,851	\$19,108	2.5%	\$257	1.4%
Mobile Sources/Clean Fuels	\$20,988	\$21,968	\$26,879	\$27,874	N/A	\$995	3.7%
Sources Test & Lab Analysis	\$746	\$683	\$719	\$775	2.5%	\$56	7.8%
Hearing Board Fees	\$532	\$164	\$540	\$308	2.5%	-\$232	-43.0%
Transportation Program ( Rule 2202) Fees	\$845	\$892	\$959	\$861	2.5%	-\$98	-10.2%
Other Revenue***	\$33,499	\$28,093	\$25,690	\$23,417	N/A	-\$2,273	-8.8%
<b>Total</b>	<b>\$137,818</b>	<b>\$134,405</b>	<b>\$139,640</b>	<b>\$142,130</b>		<b>\$2,491</b>	<b>1.8%</b>

(Note: Numbers may not add up due to rounding.)

\* Information as reported in the Comprehensive Annual Financial Reports (FYs 2014-15 & 2015-16).

\*\* Estimates are based on actual revenue received through February 2017.

\*\*\* Other Revenues include: CARB Subvention; Federal Grants; Interest; Lease Income; Penalties/Settlements; Subscriptions; AB 2588 Reimbursement; Miscellaneous Revenues; Portable Equipment Registration Program (PERP); Area Sources; and Transfers In (from special revenue funds).

## HISTORICAL REVENUE ANALYSIS

The following sub-sections examine the distribution of revenues from various fee categories among key industries. The SCAQMD is required to undertake socioeconomic analyses by Health & Safety Code Sections 40440.8(a) and (b) for proposed rules and rule amendments that *"will significantly affect air quality or emissions limitations."* The proposed CPI-based fee adjustment does not satisfy this criterion, but the analysis herein is presented per October 29, 2010 Special Governing Board Resolution related to Rule 320. It should be noted that this analysis has used the most recent invoiced amounts at the current fee rates to arrive at an estimated picture of the current fee revenue by industry. Thus, the figures below may differ slightly from Table 1 because data sources may reflect different time periods.

### Emission Fees

Emission fees accounted for approximately 13 percent of the SCAQMD's estimated total revenue based on actual revenue received through February 2017 (Table 1). In May 2001, an emissions flat fee was introduced for all facilities with at least one operating permit.<sup>4</sup> The flat fee implemented recommendations by the California State Auditor in 1998, the Revenue Committee established by the Executive Officer in 2000, and the independent consultant for the Fee Structure Study—Thompson, Cobb, Bazilio & Associates (March 1999).

<sup>4</sup> Excluding equipment in Rule 222—Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II.

Table 2 shows the estimated revenue collected or to be collected from more than 21,000 facilities for flat emission fees (\$2.6 million, imposed on sources emitting less than the threshold amount of pollutants subject to emission fees) and emissions-based fees (\$15.59 million), the latter of which contributed approximately 86 percent of total emission fees collected.<sup>5</sup> These emissions include permitted and non-permitted emissions of NO<sub>x</sub>, SO<sub>x</sub>, VOC, TSP, CO, and specific organic gasses (SPOG) as well as toxic air contaminants<sup>6</sup> for facilities required to report their actual emissions each year. Also included were clean fuels fees for stationary sources.

The services sector (NAICS 54-81) that is made of almost 7,000 facilities contributed the highest share of the flat emission fee, contributing \$0.86 million or 33 percent of the total amount. It is followed by the retail trade sector (NAICS 44-45), with \$0.44 million paid by about 3,600 facilities. In comparison, emission-based fees were mostly collected from larger-sized businesses located within certain industry sectors. Among the 974 facilities that were subject to emission-based fees, nearly half were manufacturers (NAICS 31-33), and they contributed 73 percent of the total emission-based fees invoiced in 2016. Within this sector, the petroleum and coal industry (NAICS 324) alone contributed \$9.12 million to emissions-based fees, accounting for 80 percent of the sectoral total.

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<sup>5</sup> Emission-based fees were derived from 2016 emissions and the invoiced amount, or the amount a facility should have paid, in Calendar Year 2016 based on the existing Rule 301 fee rates.

<sup>6</sup> Listed in Table IV of Rule 301.

**Table 2: Estimated Emission Fee Revenue in Millions of Dollars (MM\$)  
by Industry Sector at Current Fee Rates**

Industry	NAICS	Flat Fee			Emission-based Fees			Total	
		MM\$	%	# of Fac.**	MM\$	%	# of Fac.**	MM\$	%
<b>Agriculture, Forestry, Fishing &amp; Hunting</b>	<b>111-115</b>	<b>\$0.01</b>	<b>0.41%</b>	<b>87</b>	<b>\$0.12</b>	<b>0.75%</b>	<b>37</b>	<b>\$0.13</b>	<b>0.70%</b>
<b>Mining</b>	<b>21</b>	<b>\$0.03</b>	<b>1.18%</b>	<b>249</b>	<b>\$0.59</b>	<b>3.78%</b>	<b>91</b>	<b>\$0.62</b>	<b>3.40%</b>
Oil and Gas Extraction	211	\$0.02	0.76%	161	\$0.33	2.09%	66	\$0.35	1.90%
Mining (except oil and gas)	212-213	\$0.01	0.42%	88	\$0.26	1.68%	25	\$0.27	1.50%
<b>Construction</b>	<b>23</b>	<b>\$0.09</b>	<b>3.53%</b>	<b>748</b>	<b>\$0.02</b>	<b>0.12%</b>	<b>11</b>	<b>\$0.11</b>	<b>0.60%</b>
<b>Manufacturing</b>	<b>31-33</b>	<b>\$0.41</b>	<b>15.60%</b>	<b>3,309</b>	<b>\$11.34</b>	<b>72.71%</b>	<b>446</b>	<b>\$11.74</b>	<b>64.56%</b>
Food Manufacturing	311	\$0.02	0.90%	191	\$0.14	0.90%	37	\$0.16	0.90%
Wood Products Manufacturing	321	\$0.01	0.35%	74	\$0.02	0.12%	7	\$0.03	0.15%
Petroleum and Coal Products Mfg.	324	\$0.01	0.39%	83	\$9.12	58.51%	39	\$9.13	50.22%
Chemical Manufacturing	325	\$0.04	1.42%	299	\$0.21	1.36%	39	\$0.25	1.37%
Nonmetallic Mineral Product Mfg.	327	\$0.03	1.05%	221	\$0.34	2.20%	28	\$0.37	2.03%
Primary & Fabricated Metal Mfg.	331-332	\$0.10	3.68%	781	\$0.52	3.36%	114	\$0.62	3.41%
Machinery Manufacturing	333	\$0.02	0.84%	179	\$0.03	0.17%	9	\$0.05	0.27%
Computer and Electronic Product Mfg.	334	\$0.03	1.17%	248	\$0.05	0.29%	20	\$0.08	0.42%
Electrical Equipment & Appliance Mfg.	335	\$0.01	0.56%	118	\$0.02	0.11%	10	\$0.03	0.17%
Motor Vehicle & Trans. Equipment Mfg.	336	\$0.03	1.01%	214	\$0.12	0.75%	33	\$0.14	0.79%
Other Manufacturing	312-339	\$0.11	4.23%	901	\$0.77	4.95%	110	\$0.88	4.84%
<b>Utilities</b>	<b>22</b>	<b>\$0.11</b>	<b>4.32%</b>	<b>922</b>	<b>\$1.07</b>	<b>6.89%</b>	<b>96</b>	<b>\$1.19</b>	<b>6.53%</b>
<b>Transportation &amp; Warehousing</b>	<b>48-49</b>	<b>\$0.07</b>	<b>2.52%</b>	<b>534</b>	<b>\$0.31</b>	<b>2.00%</b>	<b>30</b>	<b>\$0.38</b>	<b>2.07%</b>
<b>Information</b>	<b>51</b>	<b>\$0.08</b>	<b>2.94%</b>	<b>624</b>	<b>\$0.02</b>	<b>0.11%</b>	<b>7</b>	<b>\$0.09</b>	<b>0.51%</b>
Publishing Industries, Except Internet	511	\$0.00	0.13%	27	\$0.00	0.00%	1	\$0.00	0.02%
Motion Picture & Sound Recording	512	\$0.01	0.29%	63	\$0.02	0.11%	5	\$0.02	0.13%
Internet Services and data processing	518, 519	\$0.01	0.23%	48	\$0.00	0.00%	1	\$0.01	0.03%
Other Information	Other in 51	\$0.06	2.29%	486	\$0.00	0.00%	0	\$0.06	0.33%
<b>Wholesale Trade</b>	<b>42</b>	<b>\$0.12</b>	<b>4.78%</b>	<b>1,014</b>	<b>\$0.29</b>	<b>1.89%</b>	<b>44</b>	<b>\$0.42</b>	<b>2.30%</b>
<b>Retail Trade</b>	<b>44-45</b>	<b>\$0.44</b>	<b>16.93%</b>	<b>3,591</b>	<b>\$0.08</b>	<b>0.50%</b>	<b>25</b>	<b>\$0.52</b>	<b>2.85%</b>
Car & Parts Dealers	441	\$0.03	1.31%	279	\$0.01	0.04%	4	\$0.04	0.22%
Gas Stations	447	\$0.21	7.99%	1,690	\$0.06	0.40%	14	\$0.27	1.48%
Other Retail Trade	Other in 44-45	\$0.20	7.63%	1,622	\$0.01	0.06%	7	\$0.21	1.14%
<b>Finance and Insurance</b>	<b>52</b>	<b>\$0.04</b>	<b>1.40%</b>	<b>297</b>	<b>\$0.00</b>	<b>0.00%</b>	<b>1</b>	<b>\$0.04</b>	<b>0.20%</b>
<b>Real Estate and Rental Leasing</b>	<b>53</b>	<b>\$0.12</b>	<b>4.74%</b>	<b>1,005</b>	<b>\$0.03</b>	<b>0.17%</b>	<b>5</b>	<b>\$0.15</b>	<b>0.83%</b>
<b>Services</b>	<b>54-81</b>	<b>\$0.86</b>	<b>33.20%</b>	<b>7,041</b>	<b>\$1.56</b>	<b>9.99%</b>	<b>155</b>	<b>\$2.42</b>	<b>13.30%</b>
Professional and Technical Services	54	\$0.07	2.65%	561	\$0.03	0.19%	16	\$0.10	0.54%
Accommodation	721	\$0.03	0.97%	208	\$0.00	0.00%	0	\$0.03	0.14%
Food Services & Drinking Places	722	\$0.01	0.56%	119	\$0.00	0.02%	2	\$0.02	0.10%
Automotive Repairs & Maintenance	8111	\$0.24	9.31%	1,969	\$0.00	0.00%	2	\$0.24	1.33%
Dry Cleaning & Laundry Services	8123	\$0.14	5.46%	1,160	\$0.00	0.01%	5	\$0.14	0.79%
Health Care & Social Assistance	62	\$0.09	3.45%	734	\$0.10	0.64%	44	\$0.19	1.04%
Other Services	Other in 54-81	\$0.28	10.79%	2,290	\$1.42	9.13%	86	\$1.70	9.37%
<b>Public Administration</b>	<b>92</b>	<b>\$0.18</b>	<b>6.85%</b>	<b>1,447</b>	<b>\$0.16</b>	<b>1.04%</b>	<b>22</b>	<b>\$0.34</b>	<b>1.86%</b>
<b>Unclassified*</b>	<b>N/A</b>	<b>\$0.04</b>	<b>1.61%</b>	<b>344</b>	<b>\$0.01</b>	<b>0.06%</b>	<b>4</b>	<b>\$0.05</b>	<b>0.28%</b>
<b>Totals</b>		<b>\$2.60</b>	<b>100%</b>	<b>21,212</b>	<b>\$15.59</b>	<b>100%</b>	<b>974</b>	<b>\$18.19</b>	<b>100%</b>

\* Facilities with no NAICS codes assigned are categorized as "unclassified."

\*\* Almost all facilities paying emission-based fees also pay the flat fee.

Permit Processing Fees and Annual Permit Renewal Fees

Permit processing and annual permit renewal fees by industry are shown in Table 3. Applicants for permits to construct/operate equipment listed in Rule 301 pay a permit processing fee which varies by equipment type and size. Permit fees also include other charges based on additional time and materials billed for SCAQMD staff time (if specified by the applicable rule), and other fees as required (modeling, Title V fees, CEQA analysis fees, etc.) The fee, except for time and material fees, is paid at the beginning of the permit application process. Variances in permit processing fee amounts between Table 3 - Estimated Permit Processing Revenue and Table 1 - Actual Revenues for FY 2015-2016 reflect the fact that application fees are collected at time of application, but are recognized as revenues at the time the majority of permit work is completed.

As Table 3 indicates, an estimated total of \$13.25 million from about 5,000 facilities that applied for permits to construct or operate was invoiced during FY 2015-2016. It should be noted that a facility could apply for multiple permits. As with emission fees, the majority of the permit processing fee revenue came from the manufacturing sector. It contributed \$5.78 million, or 44 percent, of the total revenue in this fee category, followed by the services sector with \$2.77 million (21 percent).

Operating permits must be renewed annually. An annual fee is assessed on the renewed permits to support continuing SCAQMD inspection and compliance activities and other permit related activities. Approximately 27,000 facilities held operating permits as of February 7, 2017. The revenue from these facilities at the current fee rate is estimated to be \$46.31 million (Table 3). The manufacturing sector, with nearly 4,000 facilities, was the largest contributor, paying \$16.81 million or 36 percent of the total annual renewal fee revenue. The sector of retail trade with about 4,000 facilities paid about \$8 million and the service sector with about 10,500 facilities paid about \$9 million, respectively.

Area Source Fees (Architectural Coatings)

Rule 314 – Fees for Architectural Coatings, was adopted on June 6, 2008 requiring manufacturers to pay fees, as well as report sales and emissions of architectural coatings to the SCAQMD. The rule affects about 200 architectural coatings manufacturers. Beginning in 2009 and each subsequent calendar year, Rule 314 requires architectural coatings manufacturers to report to SCAQMD the total annual quantity (in gallons) and emissions of each of their architectural products distributed or sold into or within the SCAQMD for use in the SCAQMD during the previous calendar year. Fees are assessed on the manufacturers' reported annual quantity of architectural coatings as well as the cumulative VOC emissions from the reported annual quantity of coatings. All fees collected from architectural coating sales in FY 2015-2016 pursuant to Rule 314 were about \$2.2 million which is around 1.6 percent of the SCAQMD's total revenue for that FY. These fees are collected from paint manufacturers who are classified under the chemical manufacturing sector (NAICS 325). The \$2.2 million fees collected from architectural coatings represent about 0.01 percent of the chemical manufacturing industry's economic output.<sup>7</sup>

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<sup>7</sup> Please refer to "The Share of Major Revenue Sources by Industry" for more details.

**Table 3: Estimated Permit Processing & Annual Permit Renewal Fee Revenue by Industry Sector at Current Fee Rates in Millions of Dollars (\$MM)**

Industry	NAICS	Permit Processing Fees <sup>1</sup>			Annual Permit Renewal Fees <sup>2</sup>		
		MM\$	%	# of Fac.	MM\$	%	# of Fac.
<b>Agriculture, Forestry, Fishing &amp; Hunting</b>	<b>111-115</b>	<b>\$0.03</b>	<b>0.23%</b>	<b>24</b>	<b>\$0.14</b>	<b>0.31%</b>	<b>118</b>
<b>Mining</b>	<b>21</b>	<b>\$0.34</b>	<b>2.58%</b>	<b>41</b>	<b>\$1.37</b>	<b>2.95%</b>	<b>351</b>
Oil and Gas Extraction	211	\$0.21	1.55%	27	\$0.97	2.10%	243
Mining (except oil and gas)	212-213	\$0.14	1.02%	14	\$0.40	0.85%	108
<b>Construction</b>	<b>23</b>	<b>\$0.37</b>	<b>2.83%</b>	<b>237</b>	<b>\$1.26</b>	<b>2.71%</b>	<b>958</b>
<b>Manufacturing</b>	<b>31-33</b>	<b>\$5.78</b>	<b>43.61%</b>	<b>749</b>	<b>\$16.81</b>	<b>36.30%</b>	<b>3,746</b>
Food Manufacturing	311	\$0.37	2.81%	65	\$1.33	2.87%	225
Wood Products Manufacturing	321	\$0.04	0.30%	12	\$0.09	0.19%	89
Petroleum and Coal Products Mfg.	324	\$1.22	9.22%	30	\$4.25	9.17%	90
Chemical Manufacturing	325	\$0.58	4.37%	87	\$1.81	3.91%	348
Nonmetallic Mineral Product Mfg.	327	\$0.30	2.26%	41	\$1.20	2.59%	238
Primary & Fabricated Metal Mfg.	331-332	\$1.21	9.17%	135	\$3.33	7.20%	860
Machinery Manufacturing	333	\$0.21	1.55%	36	\$0.34	0.73%	200
Computer and Electronic Product Mfg.	334	\$0.41	3.08%	65	\$0.71	1.53%	274
Electrical Equipment & Appliance Mfg.	335	\$0.18	1.38%	20	\$0.45	0.96%	129
Motor Vehicle & Trans. Equipment Mfg.	336	\$0.42	3.15%	51	\$0.89	1.93%	246
Other Manufacturing	312-339	\$0.84	6.32%	207	\$2.42	5.22%	1,047
<b>Utilities</b>	<b>22</b>	<b>\$1.00</b>	<b>7.54%</b>	<b>143</b>	<b>\$1.96</b>	<b>4.23%</b>	<b>947</b>
<b>Transportation &amp; Warehousing</b>	<b>48-49</b>	<b>\$0.31</b>	<b>2.33%</b>	<b>107</b>	<b>\$1.16</b>	<b>2.51%</b>	<b>609</b>
<b>Information</b>	<b>51</b>	<b>\$0.18</b>	<b>1.37%</b>	<b>266</b>	<b>\$0.52</b>	<b>1.13%</b>	<b>814</b>
Publishing Industries, Except Internet	511	\$0.01	0.06%	9	\$0.05	0.11%	35
Motion Picture & Sound Recording	512	\$0.06	0.45%	22	\$0.12	0.27%	74
Internet Services and data processing	518,519	\$0.01	0.10%	17	\$0.05	0.11%	53
Other Information	Other in 51	\$0.10	0.76%	218	\$0.30	0.64%	652
<b>Wholesale Trade</b>	<b>42</b>	<b>\$0.60</b>	<b>4.50%</b>	<b>208</b>	<b>\$2.71</b>	<b>5.86%</b>	<b>1,181</b>
<b>Retail Trade</b>	<b>44-45</b>	<b>\$0.93</b>	<b>7.03%</b>	<b>930</b>	<b>\$8.41</b>	<b>18.15%</b>	<b>4,033</b>
Car & Parts Dealers	441	\$0.10	0.74%	37	\$0.22	0.48%	306
Gas Stations	447	\$0.35	2.65%	220	\$5.73	12.38%	1,837
Other Retail Trade	Other in 44-45	\$0.48	3.64%	673	\$2.45	5.29%	1,890
<b>Finance and Insurance</b>	<b>52</b>	<b>\$0.08</b>	<b>0.59%</b>	<b>86</b>	<b>\$0.31</b>	<b>0.68%</b>	<b>352</b>
<b>Real Estate and Rental Leasing</b>	<b>53</b>	<b>\$0.34</b>	<b>2.58%</b>	<b>244</b>	<b>\$0.94</b>	<b>2.03%</b>	<b>1,147</b>
<b>Services</b>	<b>54-81</b>	<b>\$2.77</b>	<b>20.88%</b>	<b>1,594</b>	<b>\$9.01</b>	<b>19.46%</b>	<b>10,593</b>
Professional and Technical Services	54	\$0.40	3.05%	210	\$1.11	2.39%	723
Accommodation	721	\$0.05	0.39%	48	\$0.21	0.45%	267
Food Services & Drinking Places	722	\$0.09	0.65%	236	\$0.63	1.37%	2,438
Automotive Repairs & Maintenance	8111	\$0.43	3.25%	245	\$1.61	3.48%	2,279
Dry Cleaning & Laundry Services	8123	\$0.10	0.78%	99	\$0.55	1.19%	1,310
Health Care & Social Assistance	62	\$0.28	2.08%	159	\$1.06	2.30%	807
Other Services	Other in 54-81	\$1.41	10.66%	597	\$3.83	8.28%	2,769
<b>Public Administration</b>	<b>92</b>	<b>\$0.24</b>	<b>1.85%</b>	<b>184</b>	<b>\$1.12</b>	<b>2.42%</b>	<b>1,518</b>
<b>Unclassified*</b>	<b>N/A</b>	<b>\$0.28</b>	<b>2.09%</b>	<b>145</b>	<b>\$0.58</b>	<b>1.26%</b>	<b>460</b>
<b>Totals</b>		<b>\$13.25</b>	<b>100%</b>	<b>4,958</b>	<b>\$46.31</b>	<b>100%</b>	<b>26,827</b>

<sup>1</sup> Based on permit applications in FY 2015-2016.<sup>2</sup> Based on permits held on February 7, 2017.

\* Facilities with no NAICS codes assigned are categorized as “unclassified.”

**Toxic Hot Spots Fees**

AB 2588 toxic hot spots fees were calculated based on health risks and priority scores. The most recent invoiced revenue for FY 2015-2016 was approximately \$2.34 million. The services sector's share of this total was 33 percent, followed by manufacturing (19 percent) and retail trade (17 percent).

**Source Testing Fees**

The revenue from source testing fees is based on the invoiced source test fees during FY 2015-2016. During this period of time, the source test fee revenue from Rules 304 and 304.1 was \$0.49 million. The manufacturing sector accounted for 59 percent of this revenue, followed by services (17 percent).

**Rule 2202 Fees**

Rule 2202 – On-Road Motor Vehicle Mitigation Options applies to employers with 250 or more employees in the SCAQMD's jurisdiction. It provides employers with three compliance options: (1) the Employee Commute Reduction Program (ECRP); (2) emission reduction strategies (ERS) such as the use of clean fuel vehicles, re-powering of diesel engine marine vessels, and vehicle scrapping; and (3) the Air Quality Investment Program (AQIP). Employers choosing the ECRP option pay a plan review fee to the SCAQMD at the time they file their ECRP Plan. Employers choosing an ERS pay a registration fee. Employers choosing to invest in AQIP pay a registration fee and an investment fee. The investment fee portion goes to a special revenue account which is not part of the General Fund.

The revenue from Rule 2202 fees herein is based on the invoiced Rule 2202 fees during FY 2015-2016. A total of \$0.81 million was collected from Rule 2202 fees for ECRP, ERS, and AQIP. The services sector accounted for approximately 35 percent of the estimated Rule 2202 fee revenue. Unlike most of the other fee categories, only 14 percent of the revenue came from the manufacturing sector.

Share of Major Revenue Sources by Industry

Approximately 62 percent of the SCAQMD's FY 2016-2017 estimated revenue comes from the following major revenue categories: emission fees, permit processing fees, annual permit renewal fees, toxic hot spot fees, source test fees, and a portion of Rule 2202 fees. Table 4 shows the percentage of fees from these categories relative to each industry's total (gross) output and value-added to evaluate them relative to different economic measures of industries in the SCAQMD.<sup>8</sup> Value-added is a measure of compensation of employees, production taxes less subsidies, and gross operating surplus; thus to a certain degree reflects each industry's profit margin. Collectively, revenue from these fees is estimated to amount to approximately \$81 million, based on invoiced amounts at the current fee rates.

As shown in Table 4, the amount of fees paid by each industry is relatively small compared to that industry's regional output or value-added. This is the case for both industries which are predominantly comprised of small businesses, such as retail trade, and for industries predominately comprised of large businesses, such as refineries.

The petroleum and coal products manufacturing industry (NAICS 324) paid a total of \$14.69 million in various fees, which represented four hundredths of one percent of the sector's output and less than fifth of a percent of the sector's value-added. Other industries that also paid among the highest amount of fees relative to their outputs or value-added were the pipeline transportation industry (NAICS 486), the mining industry (NAICS 212), the nonmetallic mineral product manufacturing industry (NAICS 327), and waste management and remediation services (NAICS 562). Overall, major SCAQMD fee revenue, as a whole, represented less than one-hundredth of one percent of the aggregate industry output or value-added in the four-county region.

**Table 4: Share of Major Revenue by Detailed Industry**

Industry Sector	NAICS	MM\$	% of Total Fees	% of Total Output	% of Total Value-Added
Farm (Agricultural Products)	111-112	\$0.24	0.29%	0.00%	0.01%
Agriculture & Forestry support activities	115	\$0.07	0.08%	0.02%	0.02%
Oil & Gas Extraction	211	\$1.55	1.90%	0.02%	0.03%
Mining (except oil and gas)	212	\$0.63	0.77%	0.06%	0.09%
Support Activities for Mining	213	\$0.18	0.22%	0.03%	0.04%
Utilities	22	\$4.29	5.27%	0.03%	0.04%
Construction	23	\$1.80	2.22%	0.00%	0.01%
Wood Products Mfg.	321	\$0.16	0.19%	0.01%	0.03%
Nonmetallic Mineral Product Mfg.	327	\$1.88	2.31%	0.05%	0.12%
Primary Metal Mfg.	331	\$1.54	1.90%	0.02%	0.08%
Fabricated Metal Product Mfg.	332	\$3.87	4.76%	0.02%	0.04%
Machinery Manufacturing	333	\$0.63	0.77%	0.01%	0.01%
Computer & Electronic Product Mfg.	334	\$1.24	1.53%	0.00%	0.01%
Electrical Equipment & Appliance Mfg.	335	\$0.69	0.85%	0.01%	0.03%
Motor Vehicle Mfg.	3361-3363	\$0.37	0.45%	0.00%	0.02%
Transport Equip. Mfg. Excl. Motor Veh.	3364-3369	\$1.17	1.44%	0.00%	0.01%
Furniture & Related Product Mfg.	337	\$0.38	0.46%	0.01%	0.02%

<sup>8</sup> Output and Value-added data for 2014 by detailed industry were compiled by Regional Economic Modeling, Inc. (REMI). They are converted to 2016 dollars based on the GDP price index (available at: <https://www.bea.gov/>).

Miscellaneous Mfg.	339	\$0.71	0.87%	0.00%	0.01%
Food Mfg.	311	\$1.91	2.34%	0.01%	0.03%
Beverage and Tobacco Product Mfg.	312	\$0.41	0.50%	0.00%	0.01%
Textile & Textile Product Mills	313-314	\$0.41	0.50%	0.01%	0.04%
Apparel, Leather & Allied Product Mfg.	315-316	\$0.05	0.06%	0.00%	0.00%
Paper Mfg.	322	\$0.40	0.49%	0.01%	0.02%
Printing & Related Support Activities	323	\$0.58	0.71%	0.01%	0.03%
Petroleum and Coal Products Mfg.	324	\$14.69	18.05%	0.04%	0.17%
Chemical Mfg.	325	\$2.69	3.30%	0.01%	0.02%
Plastics and Rubber Products Mfg.	326	\$1.40	1.72%	0.01%	0.04%
Wholesale Trade	42	\$3.88	4.77%	0.00%	0.01%
Retail Trade	44-45	\$10.37	12.74%	0.01%	0.02%
Air Transportation	481	\$0.06	0.07%	0.00%	0.00%
Rail Transportation	482	\$0.02	0.02%	0.00%	0.00%
Water Transportation	483	\$0.02	0.02%	0.00%	0.00%
Truck Transportation	484	\$0.13	0.16%	0.00%	0.00%
Couriers & Messengers	491-492	\$0.04	0.05%	0.00%	0.00%
Transit & Ground passenger Transportation	485	\$0.10	0.12%	0.00%	0.01%
Pipeline Transportation	486	\$0.65	0.79%	0.08%	0.11%
Scenic & Sightseeing Transportation	487-488	\$0.65	0.80%	0.01%	0.01%
Warehousing & Storage	493	\$0.30	0.37%	0.00%	0.01%
Publishing Industries, Except Internet	511	\$0.07	0.09%	0.00%	0.00%
Motion Picture & Sound Recording Industries	512	\$0.23	0.28%	0.00%	0.00%
Internet Services & Data Processing	518-519	\$0.08	0.10%	0.00%	0.00%
Broadcasting, Except Internet	515	\$0.12	0.14%	0.00%	0.00%
Telecommunications	517	\$0.42	0.52%	0.00%	0.00%
Monetary Authorities	521-522, 525	\$0.19	0.23%	0.00%	0.00%
Securities, Commodity Contracts, Investments	523	\$0.23	0.28%	0.00%	0.00%
Insurance Carriers & Related Activities	524	\$0.10	0.12%	0.00%	0.00%
Real Estate	531	\$1.26	1.55%	0.00%	0.00%
Rental & Leasing Services	532-533	\$0.29	0.36%	0.00%	0.00%
Professional and Technical Services	54	\$1.70	2.09%	0.00%	0.00%
Management of Companies & Enterprises	55	\$0.05	0.06%	0.00%	0.00%
Administrative & Support Services	561	\$2.27	2.79%	0.00%	0.01%
Waste Management & Remediation Services	562	\$2.04	2.50%	0.05%	0.10%
Education Services	61	\$1.26	1.55%	0.01%	0.01%
Ambulatory Health Care Services	621	\$0.57	0.70%	0.00%	0.00%
Hospitals	622	\$0.91	1.12%	0.00%	0.01%
Nursing & Residential Care Facilities	623	\$0.15	0.19%	0.00%	0.00%
Social Assistance	624	\$0.12	0.15%	0.00%	0.00%
Performing Arts & Spectator Sports	711	\$0.08	0.10%	0.00%	0.00%
Museums, Historical Sites, Zoos, and Parks	712	\$0.03	0.04%	0.00%	0.01%
Amusement, Gambling, and Recreation	713	\$0.42	0.52%	0.00%	0.01%
Accommodation	721	\$0.34	0.41%	0.00%	0.01%
Food Services & Drinking Places	722	\$0.76	0.93%	0.00%	0.00%
Repair & Maintenance	811	\$3.05	3.75%	0.03%	0.04%
Personal & Laundry Services	812	\$1.24	1.53%	0.01%	0.02%
Membership Associations and Organizations	813	\$0.36	0.44%	0.00%	0.01%
Government	92	\$1.94	2.39%	0.00%	0.00%
Unclassified*	N/A	\$0.97	1.19%		
Totals		\$81.40	100%	0.005%	0.008%

\*Facilities with no NAICS codes assigned are categorized as "unclassified."



## REVENUE IMPACTS OF PROPOSED FEE RATE INCREASE BY INDUSTRY

Rule 320 requires annual adjustment of most fee rates in Regulation III by an amount equal to the change in CPI, which is 2.5 percent for the period of December 2015 to December 2016 unless the Board decides in a rulemaking hearing to forgo the CPI increase. Based on the FY 15-16 emissions and current equipment and activity profile of individual facilities, the fee rate increases from the 2.5 percent CPI increase are expected to increase total SCAQMD revenue by approximately \$2.03 million. A socioeconomic assessment of the proposed increase in Title V and non-Title V permit-related fees for facilities is included in the Draft Socioeconomic Assessment for Proposed Amended Regulation (PAR) III – Fees.

Table 5 shows the distribution of these fee changes across the affected industries. It includes the majority subset of the fees subject to the CPI-based rate increase. They include emission fees, permit processing fees, annual permit renewal fees, toxic hot spot fees, source test fees, and a portion of Rule 2202 fees.

The manufacturing sector as a whole would experience the largest increase in fees (approximately \$0.88 million for about 4,000 facilities), followed by the services sector (approximately \$0.38 million for about 11,000 facilities), the retail trade sector (approximately \$0.26 million for about 4,000 facilities), and the remaining sectors accounting for \$0.51 million. Within the manufacturing sector, the petroleum and coal products manufacturing industry, mostly comprised of refineries, will face an increase of around \$0.37 million, or 18 percent of the overall increase.

## SUMMARY

The above analysis provides background information on SCAQMD revenue and summarizes the economic impact on facilities regulated by SCAQMD of the automatic consumer price index (Rule 320) increase. Based on the fee categories examined in the analysis and last year's activity levels, SCAQMD revenues are expected to increase by \$2.03 million as a result of this fee rate increase. However, the amount of SCAQMD fees paid by each industry remained small relative to the industry's economic output or value-added (less than 0.01 percent overall).

**Table 5**  
**Revenue Impact of the Fee Rate Increase by Industry Sector**

Industry	NAICS	Revenue Change Due to 2.5% CPI Adjustment	Percent of Total CPI Increase
<b>Agriculture, Forestry, Fishing &amp; Hunting</b>	<b>111-115</b>	<b>\$7,611</b>	<b>0.37%</b>
<b>Mining</b>	<b>21</b>	<b>\$58,941</b>	<b>2.90%</b>
Oil and Gas Extraction	211	\$38,723	1.90%
Mining (except oil and gas)	212-213	\$20,218	0.99%
<b>Construction</b>	<b>23</b>	<b>\$45,094</b>	<b>2.22%</b>
<b>Manufacturing</b>	<b>31-33</b>	<b>\$879,439</b>	<b>43.22%</b>
Food Manufacturing	311	\$47,696	2.34%
Wood Products Manufacturing	321	\$3,950	0.19%
Petroleum and Coal Products Mfg.	324	\$367,241	18.05%
Chemical Manufacturing	325	\$67,229	3.30%
Nonmetallic Mineral Product Mfg.	327	\$47,065	2.31%
Primary & Fabricated Metal Mfg.	331-332	\$135,414	6.65%
Machinery Manufacturing	333	\$15,664	0.77%
Computer and Electronic Product Mfg.	334	\$31,107	1.53%
Electrical Equipment & Appliance Mfg.	335	\$17,348	0.85%
Motor Vehicle & Trans. Equipment Mfg.	336	\$38,406	1.89%
Other Manufacturing	312-339	\$108,319	5.32%
<b>Utilities</b>	<b>22</b>	<b>\$107,267</b>	<b>5.27%</b>
<b>Transportation &amp; Warehousing</b>	<b>48-49</b>	<b>\$48,947</b>	<b>2.41%</b>
<b>Information</b>	<b>51</b>	<b>\$23,050</b>	<b>1.13%</b>
Publishing Industries, Except Internet	511	\$1,760	0.09%
Motion Picture & Sound Recording	512	\$5,656	0.28%
Internet Services and data processing	518, 519	\$2,092	0.10%
Other Information	Other in 51	\$13,543	0.67%
<b>Wholesale Trade</b>	<b>42</b>	<b>\$96,979</b>	<b>4.77%</b>
<b>Retail Trade</b>	<b>44-45</b>	<b>\$259,324</b>	<b>12.74%</b>
Car & Parts Dealers	441	\$9,979	0.49%
Gas Stations	447	\$164,311	8.07%
Other Retail Trade	Other in 44-45	\$85,034	4.18%
<b>Finance and Insurance</b>	<b>52</b>	<b>\$12,944</b>	<b>0.64%</b>
<b>Real Estate and Rental Leasing</b>	<b>53</b>	<b>\$38,722</b>	<b>1.90%</b>
<b>Services</b>	<b>54-81</b>	<b>\$383,687</b>	<b>18.86%</b>
Professional and Technical Services	54	\$42,428	2.09%
Accommodation	721	\$8,397	0.41%
Food Services & Drinking Places	722	\$18,908	0.93%
Automotive Repairs & Maintenance	8111	\$65,682	3.23%
Dry Cleaning & Laundry Services	8123	\$21,965	1.08%
Health Care & Social Assistance	62	\$43,783	2.15%
Other Services	Other in 54-81	\$182,525	8.97%
<b>Public Administration</b>	<b>92</b>	<b>\$48,602</b>	<b>2.39%</b>
<b>Unclassified*</b>	<b>N/A</b>	<b>\$24,268</b>	<b>1.19%</b>
<b>Totals</b>		<b>\$2,034,876</b>	<b>100%</b>

\*Facilities with no NAICS codes assigned are categorized as "unclassified."

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# ATTACHMENT J

## SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

### **Final Socioeconomic Assessment for Proposed Amended Regulation III - Fees**

June 2017

#### **Executive Officer**

Wayne Nastri

#### **Deputy Executive Officer**

##### **Planning, Rule Development & Area Sources**

Philip M. Fine, Ph.D.

#### **Assistant Deputy Executive Officer**

##### **Planning, Rule Development & Area Sources**

Susan Nakamura

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**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
GOVERNING BOARD**

Chairman: DR. WILLIAM A. BURKE  
Speaker of the Assembly Appointee

Vice Chairman: BEN BENOIT  
Mayor Pro Tem, Wildomar  
Cities of Riverside County

**MEMBERS:**

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Supervisor, Fifth District  
County of Riverside

JOE BUSCAINO  
Councilmember, 15<sup>th</sup> District  
City of Los Angeles Representative

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Mayor, South Pasadena  
Cities of Los Angeles County/Eastern Region

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Governor's Appointee

SHEILA KUEHL  
Supervisor, Third District  
County of Los Angeles

LARRY MCCALLON  
Mayor Pro Tem, Highland  
Cities of San Bernardino County

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Cities of Los Angeles County/Western Region

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County of Orange

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JANICE RUTHERFORD  
Supervisor, Second District  
County of San Bernardino

**EXECUTIVE OFFICER:**

WAYNE NASTRI

## EXECUTIVE SUMMARY

A socioeconomic analysis was conducted to assess the potential impacts of the Proposed Amended Regulation III – Fees. This analysis provides background information, historical trends of SCAQMD revenues from various fees, sectoral distributions of these fees, estimated cost impacts of the proposed fee rate increases by industry, and the resultant macroeconomic job impacts. A summary of the analysis and findings is presented below.

<b>Proposed Fee Rate Increases</b>	Proposed Amended Regulation III (PAR III) – Fees consists of three components with fee impacts: (1) a proposed 2.5 percent across-the-board fee rate increase pursuant to Rule 320 – Automatic Adjustment Based on Consumer Price Index (CPI) for Regulation III Fees; <sup>1</sup> (2) Proposed Amended Rules (PARs) 301 and 306 would increase Title V annual operating permit renewal and permit processing fee rates by 16 percent per year over the next two Fiscal Years (FYs); (3) PARs 301, 306, and 309 would increase fee rates for annual operating permit renewal, permit processing, and plans for non-Title V facilities by 4 percent per year over the next two FYs.
<b>Affected Facilities</b>	Nearly all the facilities regulated by the SCAQMD would be affected by the proposed fee increases. These facilities belong to every sector of the economy.
<b>Historical Revenue Analysis</b>	This analysis examines the impact of the existing Regulation III fees on various industries. The fees examined include emissions fees, permit processing fees, annual permit renewal fees, toxic hot spot fees, source testing fees, and a portion of fees under Rule 2202 – On-Road Motor Vehicle Mitigation Options. The manufacturing sector is the largest contributor to the SCAQMD emission fees (65 percent), permit processing fees (44 percent), and annual permit renewal fees (36 percent). Overall, the costs of complying with the current Regulation III rates are very small relative to the region-wide industry output or value-added (less than 0.01 percent).
<b>Estimated Fee Increases by Industry</b>	<p>Based on the fee categories examined in this analysis and last year’s activity levels, the overall PAR III fee increases, which include the 2.5 percent across-the-board CPI-based fee rate increase for FY 17-18, the 16 percent per year permit-related fee rate increases for Title V facilities over the next two FYs, and the 4 percent per year permit-related fee rate increases for non-Title V facilities over the next two FYs, are projected to bring additional revenues totaling \$6.1 million for FY 17-18 and \$10.5 million for FY 18-19.</p> <p>The manufacturing sector is estimated to experience the largest fee increase, with an increase of \$2.8 million in FY 17-18 and \$4.9 million FY 18-19, incurred by about 4,000 permitted facilities. This is followed by the services sector which is estimated to experience an increase in fees by about \$1.0 million in FY 17-18 and \$1.7 million in FY 18-19, incurred by about 11,000 permitted facilities. Within the manufacturing sector, the petroleum and coal products manufacturing industry, mostly comprised of refineries, would experience an</p>

<sup>1</sup>Pursuant to the SCAQMD Governing Board Resolution for Rule 320, a Draft Socioeconomic Assessment of the Automatic CPI Adjustment was made publicly available on March 15, 2017. The report is available online at: <http://www.aqmd.gov/home/about/finance>.

	increase in fees by approximately \$1.1 million in FY 17-18 and \$2.0 million in FY 18-19.
<b>Projected Job Impacts of the Estimated Fee Increases</b>	A macroeconomic job impact analysis was conducted based on the estimated increases in fees paid by various industry sectors. This analysis projects an average annual increase of 58 jobs in the four-county region over a five-year period (2018-2022). The positive job impact is a net result of projected increases in jobs in local government, professional, scientific, and technical services, and administrative and waste management services, combined with smaller decreases in the manufacturing and retail trade sectors.

## INTRODUCTION

The SCAQMD General Fund is comprised of revenues from a number of sources. The majority of SCAQMD revenues are derived from emission fees, annual renewal fees, permit processing fees, and a portion of vehicle registration fees collected by the state (mobile sources/clean fuels). Other sources of revenues include Hearing Board fees, source test/analysis fees, transportation program (Rule 2202) fees, reimbursement for work associated with the AB 2588 program (toxic hot spot program), civil penalties/settlements, and other revenues.

Various fee schedules are specified in Regulation III – Fees to cover the cost of evaluation, review, planning, inspection, and monitoring related to the issuance of permits. Preparation of the budget has revealed a shortfall in the recovery of these costs. This shortfall was also confirmed with respect to Title V facilities in a recent U.S. EPA Title V Program Evaluation Report (2016), which recommended that SCAQMD take measures to cover program funding deficits. As a result, the proposed amendments would apply a 16 percent per year increase in Title V fees to permit processing and annual permit renewal over the next two fiscal years<sup>2</sup> (FY). In addition, to partly compensate for a shortfall in non-Title V fees associated with permits, the proposed amendments would apply a 4 percent per year increase in fees to non-Title V permit processing, annual permit renewals, and plan fees over the next two FYs.<sup>3</sup> These proposed increases in fee rates would be additional to the automatic adjustment of 2.5 percent by Rule 320, which is based on the California Consumer Price Index (CPI).

To examine the impact of a fee rate increase on various industry sectors, this report focuses the analysis on emission fees, permit processing fees, annual permit renewal fees, toxic hot spot fees, source test fees, and a portion of Rule 2202 fees.<sup>4</sup> Other fees that are also subject to the fee increase are area source fees and Hearing Board fees; however, they account for a relatively small portion of the total revenue. These estimated increases in fees by industry are used as inputs into the macroeconomic job impact analysis along with the corresponding increase in SCAQMD spending to estimate the impact on jobs in the region.

## REVENUE TREND

Table 1 lists historical revenue for two prior fiscal years, estimated revenue for the current FY 2016-2017, and projected revenue for FY 2017-2018, by major fee category. Estimated revenue for FY 2016-2017 is based on actual revenue received through March, 2017. FY 2017-2018 projected revenue is based on forecasts received from each office. Emission fees, permit processing fees, and annual permit renewal fees together represented approximately 62 percent of the SCAQMD's estimated total FY 2016-2017 revenues.

<sup>2</sup> A fiscal year runs from July 1 to June 30. For example, FY 2016-2017 refers to the period of July 1, 2016 to June 30, 2017. In comparison, calendar year (CY) 2017 refers to the period of January 1 to December 31, 2017.

<sup>3</sup>Please see the Staff Report for a complete list of amended fees.

<sup>4</sup>Employers that are subject to Rule 2202 can choose among various compliance options, including participation in the Air Quality Investment Program (AQIP). The AQIP program fees consist of a registration fee and an investment fee, the latter of which goes to a special revenue account to obtain necessary emissions reduction or air quality benefits and is not part of the General Fund.



Compared to the estimated revenue in FY 2016-2017, permit processing and annual operating fees would increase by \$0.9 million and \$5.0 million respectively, with the proposed 16 percent Title V permit-related fee rate increase, the 4 percent non-Title V related fee rate increase and the 2.5 percent across-the-board CPI-based increase due to Rule 320.

**Table 1: Actual and Estimated SCAQMD Revenue**

Revenue Category	FY 2014-15 Actual (Thousands)	FY 2015-16 Actual (Thousands)	FY 16-17 Estimated (Thousands)	FY 17-18 Projected (Thousands)	% Rule 320 CPI Increase	% Title V Cost Recovery Fee Increase	% Non- Title V Above CPI Increase	Changes in Revenue (from FY 16-17 Estimated)	
								Thousands	%
Emission Fees	\$19,839	\$18,985	\$19,023	\$19,481	2.5%	N/A	N/A	\$458	2.4%
Annual Renewal Fees (w/o PERP)	\$44,700	\$46,380	\$48,453	\$53,493	2.5%	16%	4.0%	\$5,041	10.4%
Permit Processing Fees	\$16,668	\$17,240	\$18,837	\$19,694	2.5%	16%	4.0%	\$856	4.5%
Mobile Sources/Clean Fuels	\$20,988	\$21,968	\$26,879	\$28,199	N/A	N/A	N/A	\$1,321	4.9%
Source Test & Lab Analysis	\$746	\$683	\$715	\$775	2.5%	N/A	N/A	\$60	8.4%
Hearing Board Fees	\$532	\$164	\$488	\$308	2.5%	N/A	N/A	-\$180	-37.0%
Transportation Program ( Rule 2202) Fees	\$845	\$892	\$824	\$861	2.5%	N/A	N/A	\$37	4.5%
Other Revenue	\$33,499	\$28,093	\$24,825	\$24,700	N/A	N/A	N/A	-\$125	-0.5%
Total	\$137,818	\$134,405	\$140,043	\$147,510				\$7,468	5.3%

(Note: Numbers may not add up due to rounding.)

\* Information as reported in the Comprehensive Annual Financial Reports (FYs 2014-15 & 2015-16).

\*\* Estimates are based on actual revenue received through March 2017.

\*\*\* Other Revenues include: CARB Subvention; Federal Grants; Interest; Lease Income; Penalties/Settlements; Subscriptions; AB 2588 Reimbursement; Miscellaneous Revenues; Portable Equipment Registration Program (PERP); Area Sources; and Transfers In (from special revenue funds).

## HISTORICAL REVENUE ANALYSIS

The following sub-sections examine the distribution of revenues from various fee categories among key industries. The SCAQMD is required to undertake socioeconomic analyses by Health & Safety Code Sections 40440.8(a) and (b) for proposed rules and rule amendments that *"will significantly affect air quality or emissions limitations."* The proposed CPI-based fee adjustment does not satisfy this criterion, but the analysis herein is presented per October 29, 2010 Special Governing Board Resolution related to Rule 320. It should be noted that this analysis has used the most recent invoiced amounts at the current fee rates to arrive at an estimated picture of the current fee revenue by industry. Thus, the figures below may differ slightly from Table 1 because data sources may reflect different time periods.

### Emission Fees

Emission fees accounted for approximately 14 percent of the SCAQMD's estimated total revenue based on actual revenue received through March 2017 (Table 1). In May 2001, an

emissions flat fee was introduced for all facilities with at least one operating permit.<sup>5</sup> The flat fee implemented recommendations by the California State Auditor in 1998, the Revenue Committee established by the Executive Officer in 2000, and the independent consultant for the Fee Structure Study—Thompson, Cobb, Bazilio & Associates (March 1999).

Table 2 shows the estimated revenue collected or to be collected from more than 21,000 facilities for flat emission fees (\$2.6 million, imposed on sources emitting less than the threshold amount of pollutants subject to emission fees) and emissions-based fees (\$15.59 million), the latter of which contributed approximately 86 percent of total emission fees collected.<sup>6</sup> These emissions include permitted and non-permitted emissions of NO<sub>x</sub>, SO<sub>x</sub>, VOC, TSP, CO, and specific organic gasses (SPOG) as well as toxic air contaminants<sup>7</sup> for facilities required to report their actual emissions each year. Also included were clean fuels fees for stationary sources.

The services sector (NAICS 54-81) with about 7,000 facilities paying emission-based fees contributed the highest share of the flat emission fee, contributing \$0.86 million or 33 percent of the total amount. It is followed by the retail trade sector (NAICS 44-45), with \$0.44 million paid by about 3,600 facilities. In comparison, emission-based fees were mostly collected from larger-sized businesses located within certain industry sectors. Among the 974 facilities that were subject to emission-based fees, nearly half were manufacturers (NAICS 31-33), and they contributed 73 percent of the total emission-based fees invoiced in 2016. Within this sector, the petroleum and coal industry (NAICS 324) alone contributed \$9.12 million to emissions-based fees, accounting for 80 percent of the sectoral total.

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<sup>5</sup> Excluding equipment in Rule 222—Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II.

<sup>6</sup> Differences between the emission-based fees estimates in Table 3 compared to Table 1 result from Table 3 estimates being derived from 2016 emissions and the invoiced amount, or the amount a facility should have paid, in Calendar Year 2016 based on the existing Rule 301 fee rates, compared to the fiscal year approach in Table 1.

<sup>7</sup> Listed in Table IV of Rule 301.

**Table 2: Estimated Emission Fee Revenue in Millions of Dollars (MM\$)  
by Industry Sector at Current Fee Rates (CY 2016)**

Industry	NAICS	Flat Fee			Emission-based Fees			Total	
		MM\$	%	# of Fac.**	MM\$	%	# of Fac.**	MM\$	%
<b>Agriculture, Forestry, Fishing &amp; Hunting</b>	<b>111-115</b>	<b>\$0.01</b>	<b>0.41%</b>	<b>87</b>	<b>\$0.12</b>	<b>0.75%</b>	<b>37</b>	<b>\$0.13</b>	<b>0.70%</b>
<b>Mining</b>	<b>21</b>	<b>\$0.03</b>	<b>1.18%</b>	<b>249</b>	<b>\$0.59</b>	<b>3.78%</b>	<b>91</b>	<b>\$0.62</b>	<b>3.40%</b>
Oil and Gas Extraction	211	\$0.02	0.76%	161	\$0.33	2.09%	66	\$0.35	1.90%
Mining (except oil and gas)	212-213	\$0.01	0.42%	88	\$0.26	1.68%	25	\$0.27	1.50%
<b>Construction</b>	<b>23</b>	<b>\$0.09</b>	<b>3.53%</b>	<b>748</b>	<b>\$0.02</b>	<b>0.12%</b>	<b>11</b>	<b>\$0.11</b>	<b>0.60%</b>
<b>Manufacturing</b>	<b>31-33</b>	<b>\$0.41</b>	<b>15.60%</b>	<b>3,309</b>	<b>\$11.34</b>	<b>72.71%</b>	<b>446</b>	<b>\$11.74</b>	<b>64.56%</b>
Food Manufacturing	311	\$0.02	0.90%	191	\$0.14	0.90%	37	\$0.16	0.90%
Wood Products Manufacturing	321	\$0.01	0.35%	74	\$0.02	0.12%	7	\$0.03	0.15%
Petroleum and Coal Products Mfg.	324	\$0.01	0.39%	83	\$9.12	58.51%	39	\$9.13	50.22%
Chemical Manufacturing	325	\$0.04	1.42%	299	\$0.21	1.36%	39	\$0.25	1.37%
Nonmetallic Mineral Product Mfg.	327	\$0.03	1.05%	221	\$0.34	2.20%	28	\$0.37	2.03%
Primary & Fabricated Metal Mfg.	331-332	\$0.10	3.68%	781	\$0.52	3.36%	114	\$0.62	3.41%
Machinery Manufacturing	333	\$0.02	0.84%	179	\$0.03	0.17%	9	\$0.05	0.27%
Computer and Electronic Product Mfg.	334	\$0.03	1.17%	248	\$0.05	0.29%	20	\$0.08	0.42%
Electrical Equipment & Appliance Mfg.	335	\$0.01	0.56%	118	\$0.02	0.11%	10	\$0.03	0.17%
Motor Vehicle & Trans. Equipment Mfg.	336	\$0.03	1.01%	214	\$0.12	0.75%	33	\$0.14	0.79%
Other Manufacturing	312-339	\$0.11	4.23%	901	\$0.77	4.95%	110	\$0.88	4.84%
<b>Utilities</b>	<b>22</b>	<b>\$0.11</b>	<b>4.32%</b>	<b>922</b>	<b>\$1.07</b>	<b>6.89%</b>	<b>96</b>	<b>\$1.19</b>	<b>6.53%</b>
<b>Transportation &amp; Warehousing</b>	<b>48-49</b>	<b>\$0.07</b>	<b>2.52%</b>	<b>534</b>	<b>\$0.31</b>	<b>2.00%</b>	<b>30</b>	<b>\$0.38</b>	<b>2.07%</b>
<b>Information</b>	<b>51</b>	<b>\$0.08</b>	<b>2.94%</b>	<b>624</b>	<b>\$0.02</b>	<b>0.11%</b>	<b>7</b>	<b>\$0.09</b>	<b>0.51%</b>
Publishing Industries, Except Internet	511	\$0.00	0.13%	27	\$0.00	0.00%	1	\$0.00	0.02%
Motion Picture & Sound Recording	512	\$0.01	0.29%	63	\$0.02	0.11%	5	\$0.02	0.13%
Internet Services and data processing	518, 519	\$0.01	0.23%	48	\$0.00	0.00%	1	\$0.01	0.03%
Other Information	Other in 51	\$0.06	2.29%	486	\$0.00	0.00%	0	\$0.06	0.33%
<b>Wholesale Trade</b>	<b>42</b>	<b>\$0.12</b>	<b>4.78%</b>	<b>1,014</b>	<b>\$0.29</b>	<b>1.89%</b>	<b>44</b>	<b>\$0.42</b>	<b>2.30%</b>
<b>Retail Trade</b>	<b>44-45</b>	<b>\$0.44</b>	<b>16.93%</b>	<b>3,591</b>	<b>\$0.08</b>	<b>0.50%</b>	<b>25</b>	<b>\$0.52</b>	<b>2.85%</b>
Car & Parts Dealers	441	\$0.03	1.31%	279	\$0.01	0.04%	4	\$0.04	0.22%
Gas Stations	447	\$0.21	7.99%	1,690	\$0.06	0.40%	14	\$0.27	1.48%
Other Retail Trade	Other in 44-45	\$0.20	7.63%	1,622	\$0.01	0.06%	7	\$0.21	1.14%
<b>Finance and Insurance</b>	<b>52</b>	<b>\$0.04</b>	<b>1.40%</b>	<b>297</b>	<b>\$0.00</b>	<b>0.00%</b>	<b>1</b>	<b>\$0.04</b>	<b>0.20%</b>
<b>Real Estate and Rental Leasing</b>	<b>53</b>	<b>\$0.12</b>	<b>4.74%</b>	<b>1,005</b>	<b>\$0.03</b>	<b>0.17%</b>	<b>5</b>	<b>\$0.15</b>	<b>0.83%</b>
<b>Services</b>	<b>54-81</b>	<b>\$0.86</b>	<b>33.20%</b>	<b>7,041</b>	<b>\$1.56</b>	<b>9.99%</b>	<b>155</b>	<b>\$2.42</b>	<b>13.30%</b>
Professional and Technical Services	54	\$0.07	2.65%	561	\$0.03	0.19%	16	\$0.10	0.54%
Accommodation	721	\$0.03	0.97%	208	\$0.00	0.00%	0	\$0.03	0.14%
Food Services & Drinking Places	722	\$0.01	0.56%	119	\$0.00	0.02%	2	\$0.02	0.10%
Automotive Repairs & Maintenance	8111	\$0.24	9.31%	1,969	\$0.00	0.00%	2	\$0.24	1.33%
Dry Cleaning & Laundry Services	8123	\$0.14	5.46%	1,160	\$0.00	0.01%	5	\$0.14	0.79%
Health Care & Social Assistance	62	\$0.09	3.45%	734	\$0.10	0.64%	44	\$0.19	1.04%
Other Services	Other in 54-81	\$0.28	10.79%	2,290	\$1.42	9.13%	86	\$1.70	9.37%
<b>Public Administration</b>	<b>92</b>	<b>\$0.18</b>	<b>6.85%</b>	<b>1,447</b>	<b>\$0.16</b>	<b>1.04%</b>	<b>22</b>	<b>\$0.34</b>	<b>1.86%</b>
<b>Unclassified*</b>	<b>N/A</b>	<b>\$0.04</b>	<b>1.61%</b>	<b>344</b>	<b>\$0.01</b>	<b>0.06%</b>	<b>4</b>	<b>\$0.05</b>	<b>0.28%</b>
<b>Totals</b>		<b>\$2.60</b>	<b>100%</b>	<b>21,212</b>	<b>\$15.59</b>	<b>100%</b>	<b>974</b>	<b>\$18.19</b>	<b>100%</b>

\* Facilities with no NAICS codes assigned are categorized as "unclassified."

\*\* Almost all facilities paying emission-based fees also pay the flat fee.

Permit Processing Fees and Annual Permit Renewal Fees

Permit processing and annual permit renewal fees by industry are shown in Table 3. Applicants for permits to construct/operate equipment listed in Rule 301 pay a permit processing fee which varies by equipment type and size. Permit fees also include other charges based on additional time and materials billed for SCAQMD staff time (if specified by the applicable rule), and other fees as required (modeling, Title V fees, CEQA analysis fees, etc.) The fee, except for time and material fees, is paid at the beginning of the permit application process. Variances in permit processing fee amounts between Table 3 - Estimated Permit Processing Revenue and Table 1 - Actual Revenues for FY 2015-2016 reflect the fact that application fees are collected at time of application, but are recognized as revenues at the time the majority of permit work is completed.

As Table 3 indicates, an estimated total of \$13.25 million from about 5,000 facilities that applied for permits to construct or operate was invoiced during FY 2015-2016. It should be noted that a facility could apply for multiple permits. As with emission fees, the majority of the permit processing fee revenue came from the manufacturing sector. It contributed \$5.78 million, or 44 percent, of the total revenue in this fee category, followed by the services sector with \$2.77 million (21 percent).

Operating permits must be renewed annually. An annual fee is assessed on the renewed permits to support continuing SCAQMD inspection and compliance activities and other permit related activities. Approximately 27,000 facilities held operating permits as of February 7, 2017. The revenue from these facilities at the current fee rate is estimated to be \$46.31 million (Table 3). The manufacturing sector, with nearly 4,000 facilities, was the largest contributor, paying \$16.81 million or 36 percent of the total annual renewal fee revenue, it is followed by the service sector with about 11,000 facilities paid about \$9 million, and the retail trade sector with about 4,000 facilities that paid about \$8 million.

Area Source Fees (Architectural Coatings)

Rule 314 – Fees for Architectural Coatings, was adopted on June 6, 2008 requiring manufacturers to pay fees, as well as report sales and emissions of architectural coatings to the SCAQMD. The rule affects about 200 architectural coatings manufacturers. Beginning in 2009 and each subsequent calendar year, Rule 314 requires architectural coatings manufacturers to report to SCAQMD the total annual quantity (in gallons) and emissions of each of their architectural products distributed or sold into or within the SCAQMD for use in the SCAQMD during the previous calendar year. Fees are assessed on the manufacturers' reported annual quantity of architectural coatings as well as the cumulative VOC emissions from the reported annual quantity of coatings. All fees collected from architectural coating sales in FY 2015-2016 pursuant to Rule 314 were about \$2.2 million which is around 1.6 percent of the SCAQMD's total revenue for that FY. These fees are collected from paint manufacturers who are classified under the chemical manufacturing sector (NAICS 325). The \$2.2 million fees collected from architectural coatings represent about 0.01 percent of the chemical manufacturing industry's economic output (Table 4).

**Table 3: Estimated Permit Processing & Annual Permit Renewal Fee Revenue by Industry Sector at Current Fee Rates in Millions of Dollars (FY 15-16)**

Industry	NAICS	Permit Processing Fees <sup>1</sup>			Annual Permit Renewal Fees <sup>2</sup>		
		MM\$	%	# of Fac.	MM\$	%	# of Fac.
<b>Agriculture, Forestry, Fishing &amp; Hunting</b>	<b>111-115</b>	<b>\$0.03</b>	<b>0.23%</b>	<b>24</b>	<b>\$0.14</b>	<b>0.31%</b>	<b>118</b>
<b>Mining</b>	<b>21</b>	<b>\$0.34</b>	<b>2.58%</b>	<b>41</b>	<b>\$1.37</b>	<b>2.95%</b>	<b>351</b>
Oil and Gas Extraction	211	\$0.21	1.55%	27	\$0.97	2.10%	243
Mining (except oil and gas)	212-213	\$0.14	1.02%	14	\$0.40	0.85%	108
<b>Construction</b>	<b>23</b>	<b>\$0.37</b>	<b>2.83%</b>	<b>237</b>	<b>\$1.26</b>	<b>2.71%</b>	<b>958</b>
<b>Manufacturing</b>	<b>31-33</b>	<b>\$5.78</b>	<b>43.61%</b>	<b>749</b>	<b>\$16.81</b>	<b>36.30%</b>	<b>3,746</b>
Food Manufacturing	311	\$0.37	2.81%	65	\$1.33	2.87%	225
Wood Products Manufacturing	321	\$0.04	0.30%	12	\$0.09	0.19%	89
Petroleum and Coal Products Mfg.	324	\$1.22	9.22%	30	\$4.25	9.17%	90
Chemical Manufacturing	325	\$0.58	4.37%	87	\$1.81	3.91%	348
Nonmetallic Mineral Product Mfg.	327	\$0.30	2.26%	41	\$1.20	2.59%	238
Primary & Fabricated Metal Mfg.	331-332	\$1.21	9.17%	135	\$3.33	7.20%	860
Machinery Manufacturing	333	\$0.21	1.55%	36	\$0.34	0.73%	200
Computer and Electronic Product Mfg.	334	\$0.41	3.08%	65	\$0.71	1.53%	274
Electrical Equipment & Appliance Mfg.	335	\$0.18	1.38%	20	\$0.45	0.96%	129
Motor Vehicle & Trans. Equipment Mfg.	336	\$0.42	3.15%	51	\$0.89	1.93%	246
Other Manufacturing	312-339	\$0.84	6.32%	207	\$2.42	5.22%	1,047
<b>Utilities</b>	<b>22</b>	<b>\$1.00</b>	<b>7.54%</b>	<b>143</b>	<b>\$1.96</b>	<b>4.23%</b>	<b>947</b>
<b>Transportation &amp; Warehousing</b>	<b>48-49</b>	<b>\$0.31</b>	<b>2.33%</b>	<b>107</b>	<b>\$1.16</b>	<b>2.51%</b>	<b>609</b>
<b>Information</b>	<b>51</b>	<b>\$0.18</b>	<b>1.37%</b>	<b>266</b>	<b>\$0.52</b>	<b>1.13%</b>	<b>814</b>
Publishing Industries, Except Internet	511	\$0.01	0.06%	9	\$0.05	0.11%	35
Motion Picture & Sound Recording	512	\$0.06	0.45%	22	\$0.12	0.27%	74
Internet Services and data processing	518,519	\$0.01	0.10%	17	\$0.05	0.11%	53
Other Information	Other in 51	\$0.10	0.76%	218	\$0.30	0.64%	652
<b>Wholesale Trade</b>	<b>42</b>	<b>\$0.60</b>	<b>4.50%</b>	<b>208</b>	<b>\$2.71</b>	<b>5.86%</b>	<b>1,181</b>
<b>Retail Trade</b>	<b>44-45</b>	<b>\$0.93</b>	<b>7.03%</b>	<b>930</b>	<b>\$8.41</b>	<b>18.15%</b>	<b>4,033</b>
Car & Parts Dealers	441	\$0.10	0.74%	37	\$0.22	0.48%	306
Gas Stations	447	\$0.35	2.65%	220	\$5.73	12.38%	1,837
Other Retail Trade	Other in 44-45	\$0.48	3.64%	673	\$2.45	5.29%	1,890
<b>Finance and Insurance</b>	<b>52</b>	<b>\$0.08</b>	<b>0.59%</b>	<b>86</b>	<b>\$0.31</b>	<b>0.68%</b>	<b>352</b>
<b>Real Estate and Rental Leasing</b>	<b>53</b>	<b>\$0.34</b>	<b>2.58%</b>	<b>244</b>	<b>\$0.94</b>	<b>2.03%</b>	<b>1,147</b>
<b>Services</b>	<b>54-81</b>	<b>\$2.77</b>	<b>20.88%</b>	<b>1,594</b>	<b>\$9.01</b>	<b>19.46%</b>	<b>10,593</b>
Professional and Technical Services	54	\$0.40	3.05%	210	\$1.11	2.39%	723
Accommodation	721	\$0.05	0.39%	48	\$0.21	0.45%	267
Food Services & Drinking Places	722	\$0.09	0.65%	236	\$0.63	1.37%	2,438
Automotive Repairs & Maintenance	8111	\$0.43	3.25%	245	\$1.61	3.48%	2,279
Dry Cleaning & Laundry Services	8123	\$0.10	0.78%	99	\$0.55	1.19%	1,310
Health Care & Social Assistance	62	\$0.28	2.08%	159	\$1.06	2.30%	807
Other Services	Other in 54-81	\$1.41	10.66%	597	\$3.83	8.28%	2,769
<b>Public Administration</b>	<b>92</b>	<b>\$0.24</b>	<b>1.85%</b>	<b>184</b>	<b>\$1.12</b>	<b>2.42%</b>	<b>1,518</b>
<b>Unclassified*</b>	<b>N/A</b>	<b>\$0.28</b>	<b>2.09%</b>	<b>145</b>	<b>\$0.58</b>	<b>1.26%</b>	<b>460</b>
<b>Totals</b>		<b>\$13.25</b>	<b>100%</b>	<b>4,958</b>	<b>\$46.31</b>	<b>100%</b>	<b>26,827</b>

<sup>1</sup> Based on permit applications in FY 2015-2016.<sup>2</sup> Based on permits held on February 7, 2017.

\* Facilities with no NAICS codes assigned are categorized as “unclassified.”

**Toxic Hot Spots Fees**

AB 2588 toxic hot spots fees were calculated based on health risks and priority scores. The most recent invoiced revenue for FY 2015-2016 was approximately \$2.34 million. The services sector's share of this total was 33 percent, followed by manufacturing (19 percent) and retail trade (17 percent).

**Lab Source Testing Fees**

The revenue from source testing fees was based on the invoiced source test fees during FY 2015-2016. During this period of time, the source test fee revenue from Rules 304 and 304.1 was \$0.49 million. The manufacturing sector accounted for 59 percent of this revenue, followed by services (17 percent).

**Rule 2202 Fees**

Rule 2202 – On-Road Motor Vehicle Mitigation Options applies to employers with 250 or more employees, at a facility, in the SCAQMD's jurisdiction. It provides employers with three compliance options: (1) the Employee Commute Reduction Program (ECRP); (2) emission reduction strategies (ERS) such as the purchase of emission credits, use of clean fuel vehicles, re-powering of diesel engine marine vessels, and vehicle scrapping; and (3) the Air Quality Investment Program (AQIP). Employers choosing the ECRP option pay a plan review fee to the SCAQMD at the time they file their ECRP Plan. Employers choosing an ERS pay a registration fee. Employers choosing to invest in AQIP pay a registration fee and an investment fee. The investment fee portion goes to a special revenue account which is not part of the General Fund.

The revenue from Rule 2202 fees herein was based on the invoiced Rule 2202 fees during FY 2015-2016. A total of \$0.89 million was collected from Rule 2202 fees for ECRP, ERS, and AQIP (Table 1). The services sector accounted for approximately 35 percent of the estimated Rule 2202 fee revenue. Unlike most of the other fee categories, only 14 percent of the revenue came from the manufacturing sector.

Share of Major Revenue Sources by Industry

Approximately 62 percent of the SCAQMD's FY 2016-2017 estimated revenue comes from the following major revenue categories: emission fees, permit processing fees, annual permit renewal fees, toxic hot spot fees, source test fees, and a portion of Rule 2202 fees. Table 4 shows the percentage of fees from these categories relative to each industry's total (gross) output and value-added to evaluate them relative to different economic measures of industries in the SCAQMD.<sup>8</sup> Value-added is a measure of compensation of employees, production taxes less subsidies, and gross operating surplus; thus to a certain degree reflects each industry's profit margin. Collectively, revenue from these fees is estimated to amount to approximately \$81 million, based on invoiced amounts at the current fee rates.

As shown in Table 4, the amount of fees paid by each industry is relatively small compared to that industry's regional output or value-added. This is the case for industries which are predominantly comprised of small businesses, such as retail trade, and for industries predominately comprised of large businesses, such as refineries.

The petroleum and coal products manufacturing industry (NAICS 324) paid a total of \$14.69 million in various fees, which represented four hundredths of one percent of the sector's output and less than fifth of a percent of the sector's value-added. Other industries that also paid among the highest amount of fees relative to their outputs or value-added were the pipeline transportation industry (NAICS 486), the mining industry (NAICS 212), the nonmetallic mineral product manufacturing industry (NAICS 327), and waste management and remediation services (NAICS 562). Overall, major SCAQMD fee revenue, as a whole, represented less than one-hundredth of one percent of the aggregate industry output or value-added in the four-county region.

**Table 4: Share of Major Revenue by Detailed Industry**

Industry Sector	NAICS	MM\$	% of Total Fees	% of Total Output	% of Total Value-Added
Farm (Agricultural Products)	111-112	\$0.24	0.29%	0.00%	0.01%
Agriculture & Forestry support activities	115	\$0.07	0.08%	0.02%	0.02%
Oil & Gas Extraction	211	\$1.55	1.90%	0.02%	0.03%
Mining (except oil and gas)	212	\$0.63	0.77%	0.06%	0.09%
Support Activities for Mining	213	\$0.18	0.22%	0.03%	0.04%
Utilities	22	\$4.29	5.27%	0.03%	0.04%
Construction	23	\$1.80	2.22%	0.00%	0.01%
Wood Products Mfg.	321	\$0.16	0.19%	0.01%	0.03%
Nonmetallic Mineral Product Mfg.	327	\$1.88	2.31%	0.05%	0.12%
Primary Metal Mfg.	331	\$1.54	1.90%	0.02%	0.08%
Fabricated Metal Product Mfg.	332	\$3.87	4.76%	0.02%	0.04%
Machinery Manufacturing	333	\$0.63	0.77%	0.01%	0.01%
Computer & Electronic Product Mfg.	334	\$1.24	1.53%	0.00%	0.01%
Electrical Equipment & Appliance Mfg.	335	\$0.69	0.85%	0.01%	0.03%
Motor Vehicle Mfg.	3361-3363	\$0.37	0.45%	0.00%	0.02%
Transport Equip. Mfg. Excl. Motor Veh.	3364-3369	\$1.17	1.44%	0.00%	0.01%
Furniture & Related Product Mfg.	337	\$0.38	0.46%	0.01%	0.02%

<sup>8</sup> Output and Value-added data for 2014 by detailed industry were compiled by Regional Economic Modeling, Inc. (REMI). They are converted to 2016 dollars based on the GDP price index (available at: <https://www.bea.gov/>).

**Table 4: Share of Major Revenue by Detailed Industry (continued)**

Industry Sector	NAICS	MM\$	% of Total Fees	% of Total Output	% of Total Value-Added
Miscellaneous Mfg.	339	\$0.71	0.87%	0.00%	0.01%
Food Mfg.	311	\$1.91	2.34%	0.01%	0.03%
Beverage and Tobacco Product Mfg.	312	\$0.41	0.50%	0.00%	0.01%
Textile & Textile Product Mills	313-314	\$0.41	0.50%	0.01%	0.04%
Apparel, Leather & Allied Product Mfg.	315-316	\$0.05	0.06%	0.00%	0.00%
Paper Mfg.	322	\$0.40	0.49%	0.01%	0.02%
Printing & Related Support Activities	323	\$0.58	0.71%	0.01%	0.03%
Petroleum and Coal Products Mfg.	324	\$14.69	18.05%	0.04%	0.17%
Chemical Mfg.	325	\$2.69	3.30%	0.01%	0.02%
Plastics and Rubber Products Mfg.	326	\$1.40	1.72%	0.01%	0.04%
Wholesale Trade	42	\$3.88	4.77%	0.00%	0.01%
Retail Trade	44-45	\$10.37	12.74%	0.01%	0.02%
Air Transportation	481	\$0.06	0.07%	0.00%	0.00%
Rail Transportation	482	\$0.02	0.02%	0.00%	0.00%
Water Transportation	483	\$0.02	0.02%	0.00%	0.00%
Truck Transportation	484	\$0.13	0.16%	0.00%	0.00%
Couriers & Messengers	491-492	\$0.04	0.05%	0.00%	0.00%
Transit & Ground passenger Transportation	485	\$0.10	0.12%	0.00%	0.01%
Pipeline Transportation	486	\$0.65	0.79%	0.08%	0.11%
Scenic & Sightseeing Transportation	487-488	\$0.65	0.80%	0.01%	0.01%
Warehousing & Storage	493	\$0.30	0.37%	0.00%	0.01%
Publishing Industries, Except Internet	511	\$0.07	0.09%	0.00%	0.00%
Motion Picture & Sound Recording Industries	512	\$0.23	0.28%	0.00%	0.00%
Internet Services & Data Processing	518-519	\$0.08	0.10%	0.00%	0.00%
Broadcasting, Except Internet	515	\$0.12	0.14%	0.00%	0.00%
Telecommunications	517	\$0.42	0.52%	0.00%	0.00%
Monetary Authorities	521-522, 525	\$0.19	0.23%	0.00%	0.00%
Securities, Commodity Contracts, Investments	523	\$0.23	0.28%	0.00%	0.00%
Insurance Carriers & Related Activities	524	\$0.10	0.12%	0.00%	0.00%
Real Estate	531	\$1.26	1.55%	0.00%	0.00%
Rental & Leasing Services	532-533	\$0.29	0.36%	0.00%	0.00%
Professional and Technical Services	54	\$1.70	2.09%	0.00%	0.00%
Management of Companies & Enterprises	55	\$0.05	0.06%	0.00%	0.00%
Administrative & Support Services	561	\$2.27	2.79%	0.00%	0.01%
Waste Management & Remediation Services	562	\$2.04	2.50%	0.05%	0.10%
Education Services	61	\$1.26	1.55%	0.01%	0.01%
Ambulatory Health Care Services	621	\$0.57	0.70%	0.00%	0.00%
Hospitals	622	\$0.91	1.12%	0.00%	0.01%
Nursing & Residential Care Facilities	623	\$0.15	0.19%	0.00%	0.00%
Social Assistance	624	\$0.12	0.15%	0.00%	0.00%
Performing Arts & Spectator Sports	711	\$0.08	0.10%	0.00%	0.00%
Museums, Historical Sites, Zoos, and Parks	712	\$0.03	0.04%	0.00%	0.01%
Amusement, Gambling, and Recreation	713	\$0.42	0.52%	0.00%	0.01%
Accommodation	721	\$0.34	0.41%	0.00%	0.01%
Food Services & Drinking Places	722	\$0.76	0.93%	0.00%	0.00%
Repair & Maintenance	811	\$3.05	3.75%	0.03%	0.04%
Personal & Laundry Services	812	\$1.24	1.53%	0.01%	0.02%
Membership Associations and Organizations	813	\$0.36	0.44%	0.00%	0.01%
Government	92	\$1.94	2.39%	0.00%	0.00%
Unclassified*	N/A	\$0.97	1.19%		
Totals		\$81.40	100%	0.005%	0.008%



## REVENUE IMPACTS OF PROPOSED FEE RATE INCREASES BY INDUSTRY

PAR III – Fees consist of three components with fee impacts: (1) a proposed 2.5 percent across-the-board fee rate increase pursuant to Rule 320 – Automatic Adjustment Based on CPI for Regulation III Fees; (2) PARs 301 and 306 would increase Title V annual operating permit renewal and permit processing fee rates by 16 percent per year over the next two FYs; (3) PARs 301, 306, and 309 fees would increase fee rates for annual operating permit renewals, permit processing, and plans for non-Title V facilities by 4 percent per year over the next two FYs. Based on the 2016 emissions and current equipment and activity profile of individual facilities, these fee rate increases are expected to increase total SCAQMD revenue by approximately \$6.1 million for FY 17-18 and \$10.5 million for FY 18-19 and beyond.<sup>9</sup>

Table 5 shows the distribution of these fee changes across the affected industries. It includes the majority subset of the fees subject to the PAR III fee increases. They include emission fees, permit processing fees, annual permit renewal fees, toxic hot spot fees, source test fees, and a portion of Rule 2202 fees.

The manufacturing sector is estimated to experience the largest increase in fees, with an increase of \$2.8 million in FY 17-18 and \$4.9 million FY 18-19, incurred by about 4,000 permitted facilities. This is followed by the services sector which is estimated to experience an increase in fees by about \$1.0 million in FY 17-18 and \$1.7 million in FY 18-19, incurred by about 11,000 permitted facilities. Within the manufacturing sector, the petroleum and coal products manufacturing industry, mostly comprised of refineries, would experience an increase in fees by approximately \$1.1 million in FY 17-18 and \$2.0 million in FY 18-19.

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<sup>9</sup> Revenue projections for the next two FYs from emission-based fees are based on calendar year 2016 emissions.

**Table 5: Revenue Impacts of Proposed Fee Rate Increases by Industry**

Industry	NAICS	FY 17-18		FY 18-19	
		Revenue Change Due to CPI and PAR III Fee Increases	Share of Increase	Revenue Change Due to PAR III Fee Increases*	Share of Increase
<b>Agriculture, Forestry, Fishing &amp; Hunting</b>	<b>111-115</b>	<b>\$14,859</b>	<b>0.2%</b>	<b>\$22,154</b>	<b>0.2%</b>
<b>Mining</b>	<b>21</b>	<b>\$139,008</b>	<b>2.3%</b>	<b>\$224,064</b>	<b>2.1%</b>
Oil and Gas Extraction	211	\$91,947	1.5%	\$148,272	1.4%
Mining (except oil and gas)	212-213	\$47,061	0.8%	\$75,792	0.7%
<b>Construction</b>	<b>23</b>	<b>\$115,713</b>	<b>1.9%</b>	<b>\$185,540</b>	<b>1.8%</b>
<b>Manufacturing</b>	<b>31-33</b>	<b>\$2,796,371</b>	<b>45.9%</b>	<b>\$4,930,315</b>	<b>46.9%</b>
Food Manufacturing	311	\$156,259	2.6%	\$276,542	2.6%
Wood Products Manufacturing	321	\$10,768	0.2%	\$18,488	0.2%
Petroleum and Coal Products Mfg.	324	\$1,137,008	18.6%	\$2,033,638	19.4%
Chemical Manufacturing	325	\$224,070	3.7%	\$371,455	3.5%
Nonmetallic Mineral Product Mfg.	327	\$163,427	2.7%	\$292,455	2.8%
Primary & Fabricated Metal Mfg.	331-332	\$446,896	7.3%	\$791,437	7.5%
Machinery Manufacturing	333	\$47,139	0.8%	\$81,489	0.8%
Computer and Electronic Product Mfg.	334	\$88,254	1.4%	\$146,958	1.4%
Electrical Equipment & Appliance Mfg.	335	\$45,325	0.7%	\$74,469	0.7%
Motor Vehicle & Trans. Equipment Mfg.	336	\$159,496	2.6%	\$295,927	2.8%
Other Manufacturing	312-339	\$317,728	5.2%	\$547,456	5.2%
<b>Utilities</b>	<b>22</b>	<b>\$449,269</b>	<b>7.4%</b>	<b>\$841,919</b>	<b>8.0%</b>
<b>Transportation &amp; Warehousing</b>	<b>48-49</b>	<b>\$203,697</b>	<b>3.3%</b>	<b>\$381,364</b>	<b>3.6%</b>
<b>Information</b>	<b>51</b>	<b>\$59,729</b>	<b>1.0%</b>	<b>\$98,300</b>	<b>0.9%</b>
Publishing Industries, Except Internet	511	\$5,680	0.1%	\$9,889	0.1%
Motion Picture & Sound Recording	512	\$18,336	0.3%	\$32,537	0.3%
Internet Services and data processing	518,519	\$4,689	0.1%	\$7,390	0.1%
Other Information	Other in 51	\$31,024	0.5%	\$48,483	0.5%
<b>Wholesale Trade</b>	<b>42</b>	<b>\$308,153</b>	<b>5.1%</b>	<b>\$534,289</b>	<b>5.1%</b>
<b>Retail Trade</b>	<b>44-45</b>	<b>\$642,019</b>	<b>10.5%</b>	<b>\$1,037,493</b>	<b>9.9%</b>
Car & Parts Dealers	441	\$23,212	0.4%	\$36,854	0.4%
Gas Stations	447	\$402,379	6.6%	\$659,771	6.3%
Other Retail Trade	Other in 44-45	\$216,428	3.5%	\$340,868	3.2%
<b>Finance and Insurance</b>	<b>52</b>	<b>\$29,164</b>	<b>0.5%</b>	<b>\$45,680</b>	<b>0.4%</b>
<b>Real Estate and Rental Leasing</b>	<b>53</b>	<b>\$98,222</b>	<b>1.6%</b>	<b>\$160,450</b>	<b>1.5%</b>
<b>Services</b>	<b>54-81</b>	<b>\$1,040,461</b>	<b>17.1%</b>	<b>\$1,720,820</b>	<b>16.4%</b>
Professional and Technical Services	54	\$117,298	1.9%	\$181,212	1.7%
Accommodation	721	\$19,231	0.3%	\$30,286	0.3%
Food Services & Drinking Places	722	\$47,407	0.8%	\$77,317	0.7%
Automotive Repairs & Maintenance	8111	\$151,987	2.5%	\$239,552	2.3%
Dry Cleaning & Laundry Services	8123	\$49,293	0.8%	\$77,123	0.7%
Health Care & Social Assistance	62	\$135,577	2.2%	\$232,534	2.2%
Other Services	Other in 54-81	\$519,668	8.5%	\$882,796	8.4%
<b>Public Administration</b>	<b>92</b>	<b>\$118,691</b>	<b>1.9%</b>	<b>\$193,840</b>	<b>1.8%</b>
<b>Unclassified**</b>	<b>N/A</b>	<b>\$81,629</b>	<b>1.3%</b>	<b>\$131,006</b>	<b>1.2%</b>
<b>Totals</b>		<b>\$6,096,986</b>	<b>100%</b>	<b>\$10,507,232</b>	<b>100%</b>

\*Estimated without automatic 2017 CPI increase, which is not yet known.

\*\*Facilities with no NAICS codes assigned are categorized as "unclassified."

## MACROECONOMIC IMPACTS ON THE REGIONAL ECONOMY

The REMI model (PI+ v2.0.3) was used to assess the total socioeconomic impacts of PAR III fee increases and the corresponding SCAQMD revenue increase. It links the economic activities in the counties of Los Angeles, Orange, Riverside, and San Bernardino, and for each county, it is comprised of five interrelated blocks: (1) output and demand, (2) labor and capital, (3) population and labor force, (4) wages, prices and costs, and (5) market shares.<sup>10</sup>

The assessment herein was performed relative to a baseline scenario where PAR III fee increases, including Rule 320, would not be implemented. PAR III would create a policy scenario under which the affected facilities would incur additional annual costs of \$6.1 million for FY 17-18 and \$10.5 million for FY 18-19 and following years (Table 5). As the permitting fee increases above CPI are recommended for cost recovery purposes, the baseline scenario represents a situation where SCAQMD is not able to fully cover its costs and is in a deficit situation. For purposes of the macroeconomic impact analysis, the estimated fee increase was converted from FY to calendar year and was analyzed for a 5-year period from 2018 to 2022, where the full amount of the fee increase is realized by 2019 and is held constant for the following three years of the analysis horizon.

The impact of the proposed fee rate increases was simulated with the REMI model using estimates of the fee increase, along with the corresponding increase in SCAQMD revenue. The estimated increase in fees by industry (Table 5) were input into the REMI model as an increase in production cost for the affected industries, by county.<sup>11</sup> The distribution of the fee increase by county was estimated based on facility location, indicating that Los Angeles County would incur 66 percent of the estimated total fee increase, Orange County would incur 16 percent, Riverside County would incur 12 percent, and San Bernardino County would incur 5 percent. The resulting increase in SCAQMD revenue was input in the REMI model as an increase in local government spending, distributed by the proportion of population in each of the four counties.<sup>12</sup> This modeling approach assumes a balanced government budget, where an increase in revenue, relative to the baseline scenario, must be equivalent to an increase in government spending.<sup>13</sup>

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<sup>10</sup> Within each county, producers are made up of 66 private non-farm industries, three government sectors, and a farm sector. Trade flows are captured between sectors as well as across the four counties and the rest of U.S. Market shares of industries are dependent upon their product prices, access to production inputs, and local infrastructure. The demographic/migration component has 160 age/gender/race/ethnicity cohorts and captures population changes in births, deaths, and migration. (For details, please refer to REMI online documentation at <http://www.remi.com/products/pi>.)

<sup>11</sup> The real (adjusted for inflation) dollar cost of the fee increase is input into REMI, thereby assuming implementation of Rule 320 - Automatic CPI Adjustment of Fees in all future years of the analysis.

<sup>12</sup> Instead of using the default “local government spending” policy variable in REMI, staff elected to use a “custom local government spending” policy variable that it considers to more accurately reflect the SCAQMD spending portfolio. This custom policy variable has a lower proportion of local government spending going into the construction industry and proportionately allocates the difference to local government and professional services sectors. The simulation using this custom policy variable results in a prediction of a lower net job gain than would have been found with the default policy variable.

<sup>13</sup> This increase in revenue and equivalent increase in spending is relative to the baseline scenario, where SCAQMD is not fully recovering cost and is in a deficit situation.

Based on these inputs into the REMI model, the macroeconomic impacts of the estimated fee increases on the regional economy was simulated. The total effect on jobs consists of the effect on the directly affected sectors combined with the indirect and induced effects, which result as increased industry costs and government spending cascade through the regional economy. The overall PAR III fee increases are projected to lead to a net gain of 58 jobs on average per year above the baseline scenario job forecast from 2018 to 2022 (Table 6). As the baseline scenario represents a deficit situation for SCAQMD, direct job gain estimates are relative to that, therefore they can more precisely be described as a combination of prevented job losses and job gains. The net gain of jobs is a result of a gain in jobs from increased SCAQMD spending and foregone jobs in the industries most affected by the proposed fee increases. The foregone jobs are most concentrated in the manufacturing and retail trade sector, with each foregoing about 8 jobs per year, followed by the construction and other services sectors, with each foregoing about 4 jobs per year. These jobs foregone either occur in industries most significantly affected by the fee increase (Table 5) or industries which are significant intermediate suppliers to the affected industries, such as construction. The jobs gained from the increase in SCAQMD spending are most highly concentrated in the local government sector, which includes SCAQMD and all other local government agencies in the region, along with small gains in industries servicing the local government sector, such as professional, scientific, and technical services and administrative and waste management services.

The gain in jobs refers to a change from the baseline scenario without PAR III fee increases, in which case SCAQMD would have an estimated \$10.5 million less per year in revenue going forward from FY 18-19. As this revenue is required to recover costs, without it SCAQMD could be in a deficit situation that is not sustainable and could potentially result in staffing reductions and program cuts, including delaying progress on the permit backlog reduction plan. This potential employment impact pertinent to SCAQMD is not specifically considered in this job impact analysis due to modeling constraints.<sup>14</sup> These changes in jobs however, are very small relative to the size of the regional economy (10.7 million payroll and self-employment jobs), representing a change of about 0.001 percent.

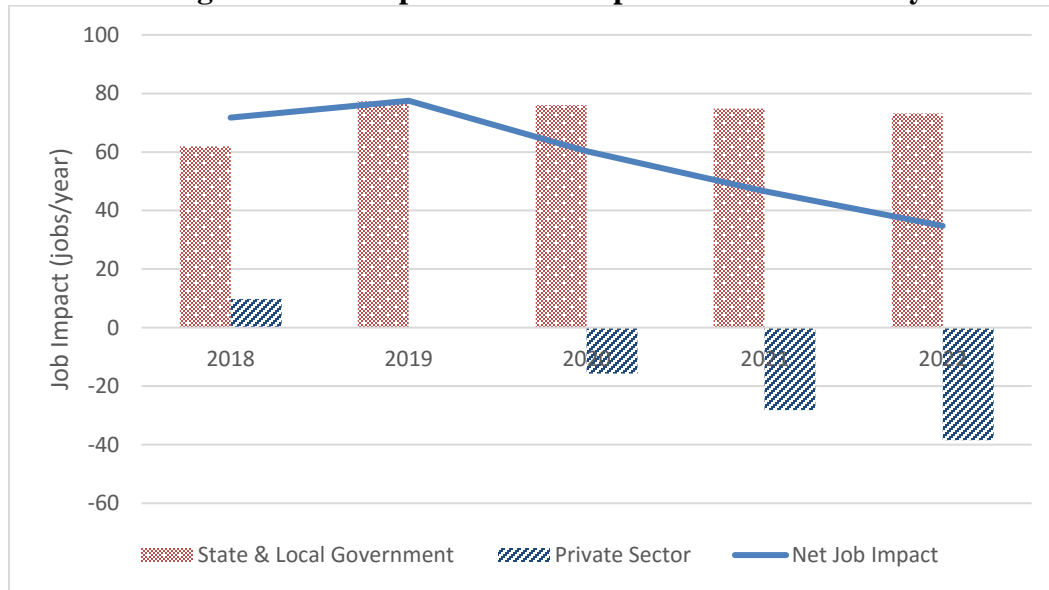
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<sup>14</sup> As common in economic modelling, each economic sector is represented by the average behavior of all entities belonging to that sector. Therefore the REMI model's representation of an average local government agency will not precisely predict any specific staffing changes, timing of changes, nor specific labor costs of SCAQMD.

**Table 6: Projected Job Impacts of Proposed Fee Rate Increases by Sector**

Sector	NAICS	Change in Jobs		Average Annual (2018-2022)		
		2018	2022	Change in Jobs	Baseline Jobs	% Change
Agriculture, Forestry, and Related Activities	11	0	0	0	28,825	0.000%
Mining, Oil and Gas Extraction	21	0	-2	-1	28,873	-0.004%
Utilities	22	0	-1	0	20,552	-0.002%
Construction	23	0	-7	-4	478,583	-0.001%
Manufacturing	33	-3	-11	-8	654,698	-0.001%
Wholesale Trade	42	0	-2	-1	475,052	0.000%
Retail Trade	44-45	-4	-10	-8	990,988	-0.001%
Transportation and Warehousing	48-49	0	-2	-1	384,822	0.000%
Information	51	0	-1	0	318,458	0.000%
Finance and Insurance	52	3	1	2	484,433	0.000%
Real Estate and Rental and Leasing	53	1	0	0	622,196	0.000%
Professional, Scientific, and Technical Services	54	6	3	5	872,981	0.001%
Management of Companies and Enterprises	55	0	-1	-1	113,974	-0.001%
Administrative and Waste Mgmt. Services	56	4	1	3	797,501	0.000%
Educational Services	61	0	-1	0	237,779	0.000%
Health Care and Social Assistance	62	4	1	3	1,316,549	0.000%
Arts, Entertainment, and Recreation	71	0	-1	0	335,725	0.000%
Accommodation and Food Services	72	1	-1	0	835,607	0.000%
Other Services, except Public Administration	81	-1	-4	-3	712,412	0.000%
State and Local Government	92	62	73	73	1,028,791	0.007%
<b>Total</b>		72	35	58	10,738,798	0.001%

Figure 1 illustrates the net change in jobs over the 2018-2022 time period. The first year impact of about 72 job gains increases to about 77 jobs in the second year due to the increased spending from the full second-year phase in of the fee increases. Following 2019 the net job gains diminish, as jobs foregone in the affected industries increase and local government job gains slightly decrease. The decreasing trend of net positive job impacts continues past 2022, but still remains positive 10 years after implementation of PAR III fee increases.

**Figure 1: Job Impacts of the Proposed Fee Increases by Year**

## SUMMARY

The above analysis provides background information on SCAQMD revenue and analyzes the socioeconomic impact of the overall PAR III fee increases. The historical revenue analysis shows that the amount of existing SCAQMD fees paid by each industry is small relative to the industry's economic output (less than 0.01 percent overall). Based on the fee categories examined in the analysis and last year's activity levels, SCAQMD revenues are expected to increase by \$6.1 million in FY 17-18 and \$10.5 million in FY 18-19 as a result of these PAR III fee increases. The manufacturing sector is estimated to incur the greatest increases in fees, followed by the services sector. Based on the estimated fee increases by industry and the corresponding increases in SCAQMD revenue, the macroeconomic job impact of the estimated fee increase was simulated. The job impact analysis projects a net gain in jobs over the 2018-2022 period relative to the baseline scenario, resulting primarily from prevented job losses and job gains in local government and jobs foregone in manufacturing and retail trade sectors. Ultimately, the projected job impact is very small relative to the regional economy, representing a change of about 0.001 percent.

**REFERENCES**

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Department of Industrial Relations, State of California. California Consumer Price Index. Retrieved February 7, 2017. <http://www.dir.ca.gov/OPRL/capriceindex.htm>

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# ATTACHMENT K



## South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178  
(909) 396-2000 • [www.aqmd.gov](http://www.aqmd.gov)

**SUBJECT: NOTICE OF EXEMPTION FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT**

**PROJECT TITLE: PROPOSED AMENDED REGULATION III – FEES**

Pursuant to the California Environmental Quality Act (CEQA) Guidelines, the South Coast Air Quality Management District (SCAQMD) is the Lead Agency and has prepared a Notice of Exemption for the project identified above.

The proposed project is amending Regulation III – Fees (Rules 301, 303, 304, 304.1, 306, 307.1, 308, 309, 311, 313, 314, and 315). SCAQMD staff has reviewed the proposed project, pursuant to CEQA Guidelines § 15002(k) – General Concepts, the three-step process for deciding which document to prepare for a project subject to CEQA and CEQA Guidelines § 15061 – Review for Exemption, procedures for determining if a project is exempt from CEQA. With respect to the proposed amendments to Rules 301, 306, 308 and 314 which are identified as being strictly administrative in nature, it can be seen with certainty that there is no possibility that the proposed project may have a significant adverse effect on the environment. Thus, the project is considered to be exempt from CEQA pursuant to CEQA Guidelines § 15061(b)(3) – Activities Covered by General Rule. Additionally, the proposed amendments to Rules 301, 303, 304, 304.1, 306, 307.1, 308, 309, 311, 313, 314, and 315 reflect increases in fees, and the administrative amendments to Rules 301, 306, 308, and 314 also involve fees charged by the District, such that all of the amendments are statutorily exempt from CEQA requirements pursuant to CEQA Guidelines § 15273 – Rates, Tolls, Fares, and Charges, because the proposed amendments involve charges by a public agency for the purpose of meeting operating expenses, purchasing supplies, equipment and materials, and meeting financial reserve requirements. A Notice of Exemption has been prepared pursuant to CEQA Guidelines § 15062 – Notice of Exemption. If the project is approved, the Notice of Exemption will be filed with the county clerks of Los Angeles, Orange, Riverside and San Bernardino counties.

Any questions regarding this Notice of Exemption should be sent to Barbara Radlein (c/o Planning, Rule Development and Area Sources) at the above address. Ms. Radlein can also be reached at (909) 396-2716. Ms. Donna Peterson is also available at (909) 396-2310 to answer any questions regarding the proposed amended regulation.

**Date:** May 3, 2017

**Signature:**

A handwritten signature in black ink, appearing to read "Barbara Radlein".

Barbara Radlein  
Program Supervisor, CEQA Section  
Planning, Rules, and Area Sources



## NOTICE OF EXEMPTION

<b>To:</b> County Clerks Counties of Los Angeles, Orange, Riverside and San Bernardino	<b>From:</b> South Coast Air Quality Management District 21865 Copley Drive Diamond Bar, CA 91765
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**Project Title:** Proposed Amended Regulation III – Fees

**Project Location:** The SCAQMD has jurisdiction over the four-county South Coast Air Basin (all of Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino counties), and the Riverside County portions of the Salton Sea Air Basin (SSAB) and Mojave Desert Air Basin (MDAB). The SCAQMD's jurisdiction includes the federal nonattainment area known as the Coachella Valley Planning Area, which is a sub-region of Riverside County and the SSAB.

**Description of Nature, Purpose, and Beneficiaries of Project:** Amendments to Regulation III rules consist of four proposed components. First, pursuant to Rule 320 – Automatic Adjustment Based on Consumer Price Index for Regulation III - Fees, staff is proposing to update most fees in Rules 301, 303, 304, 304.1, 306, 307.1, 308, 309, 311, 313, 314, and 315 on July 1, 2017 corresponding to the increase in the Calendar Year 2016 California Consumer Price Index (CPI) of 2.5 percent. Second, staff is proposing to amend Rules 301 and 306 to increase Title V Annual Operating Permit Renewal and Permit Processing Fees by an additional increment of 16 percent above the CPI for each of the next two fiscal years (FYs) in response to the U.S. EPA Title V Operating Permit Program Evaluation Report recommendation to more fully recover Title V program costs. Third, staff is proposing to amend Rules 301, 306, and 309 to increase Annual Operating Permit Renewal, Permit Processing and Plan Fees for non-Title V facilities by a further additional increment of four percent above the CPI for each of the next two FYs in order to better align program costs with revenues. Fourth, staff is proposing various administrative amendments with no fee impacts to Rules 301, 306, 308, and 314.

<b>Public Agency Approving Project:</b> South Coast Air Quality Management District	<b>Agency Carrying Out Project:</b> South Coast Air Quality Management District
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**Exempt Status:**

CEQA Guidelines § 15002(k) - General Concepts (Three Step Process)

CEQA Guidelines § 15061(b)(3) – Activities Covered by General Rule

CEQA Guidelines § 15273 – Rates, Tolls, Fares, and Charges

**Reasons why project is exempt:** SCAQMD staff has reviewed the proposed project, pursuant to CEQA Guidelines § 15002(k) – General Concepts, the three-step process for deciding which document to prepare for a project subject to CEQA and CEQA Guidelines § 15061 – Review for Exemption, procedures for determining if a project is exempt from CEQA. With respect to the proposed amendments to Rules 301, 306, 308 and 314 which are identified as being strictly administrative in nature, it can be seen with certainty that there is no possibility that the proposed project may have a significant adverse effect on the environment. Thus, the project is considered to be exempt from CEQA pursuant to CEQA Guidelines § 15061(b)(3) – Activities Covered by General Rule. Additionally, the proposed amendments to Rules 301, 303, 304, 304.1, 306, 307.1, 308, 309, 311, 313, 314, and 315 reflect increases in fees, and the administrative amendments to Rules 301, 306, 308, and 314 also involve fees charged by the District, such that all of the amendments are statutorily exempt from CEQA requirements pursuant to CEQA Guidelines § 15273 – Rates, Tolls, Fares, and Charges, because the proposed amendments involve charges by a public agency for the purpose of meeting operating expenses, purchasing supplies, equipment and materials, and meeting financial reserve requirements. A Notice of Exemption has been prepared pursuant to CEQA Guidelines § 15062 – Notice of Exemption. If the project is approved, the Notice of Exemption will be filed with the county clerks of Los Angeles, Orange, Riverside and San Bernardino counties.

**Date When Project Will Be Considered for Approval (subject to change):**

SCAQMD Governing Board Hearing: June 2, 2017; SCAQMD Headquarters

<b>CEQA Contact Person:</b> Ms. Barbara Radlein	<b>Phone Number:</b> (909) 396-2716	<b>Email:</b> <a href="mailto:bradlein@aqmd.gov">bradlein@aqmd.gov</a>	<b>Fax:</b> (909) 396-3982
<b>Regulation Contact Person:</b> Ms. Donna Peterson	<b>Phone Number:</b> (909) 396-2310	<b>Email:</b> <a href="mailto:dpeterson@aqmd.gov">dpeterson@aqmd.gov</a>	<b>Fax:</b> (909) 396-2765

<b>Date Received for Filing:</b> _____	<b>Signature:</b> _____ (Signed Upon Board Approval) Barbara Radlein Program Supervisor, CEQA Section Planning, Rule Development & Area Sources
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# **FY 2017-18 SCAQMD Budget, Goals and Priority Objectives and Regulation III**

**Governing Board Meeting  
June 2, 2017**



# FY 2017-18 Topics

- Mission Statement, Goals and Priority Objectives
- General Fund Budget
- Reg III Fee Adjustments

# Mission Statement

“To clean the air and protect the health of all residents in the South Coast Air District through practical and innovative strategies.”

# Goals

- I. Achieve Clean Air Standards.
- II. Enhance Public Education and Equitable Treatment for All Communities.
- III. Operate Efficiently and Transparently.

# Goal I Priority Objectives

	Priority Objective	Performance Indicator	Performance Measurement
1	Implementation of the 2016 AQMP	Adherence to adoption and implementation schedules for rules, working groups, assessments and programs as adopted in the 2016 AQMP.	Complete 6 rule adoptions and/or actions that result in achievements towards AQMP emissions reductions.
2	Implement the Action Plan for Toxics Facilities	Conduct monitoring and achieve emissions reductions at previously unknown high risk facilities.	Conduct monitoring of at least 10 facilities and reduce emissions from those found to have high toxics risk to the community.
3	Secure Incentive Funding for Emissions Reduction	Dollar amount of new funding sources for pollution reduction projects.	Secure \$400 Million of new funding sources.
4	Ensure Efficient Air Monitoring and Laboratory Operations	Achieve acceptable completion of valid data points out of the scheduled measurements in the SCAQMD air monitoring network for NAAQS pollutant before U.S. EPA deadline.	Achieve acceptable valid data completion submitted to U.S. EPA before deadline.
5	Ensure Timely Inspections of Facilities	Total number of Title V Inspections completed annually.	Complete 386 Title V Inspections.
6	Reduce Backlog of Permit Applications	Reduce number of permit applications in the backlog.	Reduce the number of pending permit applications to 3,800 or less.
7	Support Development of Cleaner Advanced Technology	Amount of Clean Fuels Program projects funded.	Fund \$10 Million of Clean Fuels program projects with a 1:4 leveraging ratio.

# Goal II Priority Objectives

	Priority Objective	Performance Indicator	Performance Measurement
1	Evaluation of Low Cost Air Quality Sensors	Evaluation and posting of results of low cost air quality sensors that have reached the market.	Evaluate and post results of 75% of sensors that have reached the market.
2	Outreach Events and Media Relations	Number of large community outreach events conducted in each County.	Conduct 4 large community outreach events, including 1 in each County.
3	Investigation of Community Complaints	Development of standardized acknowledgment time for community complaints.	Develop a process to measure and establish an appropriate acknowledgement time for community complaints.
4	Social Media Efforts	Percentage increase in number of social media followers.	10% increase in social media followers.
5	Engage Young Persons	Creation and number of meetings of a young persons advisory group.	Create a young persons advisory group and conduct 4 meetings.

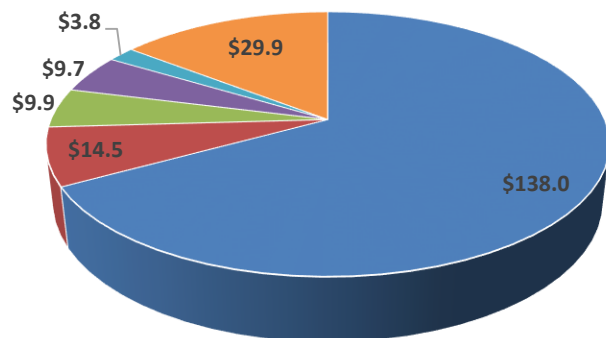
# Goal III Priority Objectives

	Priority Objective	Performance Indicator	Performance Measurement
1	Ensure Transparent Governance	Percentage of Committee and Board meeting agendas with materials made available to the public one week prior to the meeting.	100% of Committee and Board meeting agendas with materials made available to the public one week prior to the meeting.
2	Ensure Transparent Governance	Percentage of Stakeholder and Working Group meeting agendas with materials made available to the public one week prior to the meeting.	100% of Stakeholder and Working Group meeting agendas with materials made available to the public 48 hours prior to the meeting.
3	Maintain a Well Informed Staff	Number of all staff information sessions offered and conducted.	Offer and conduct 10 information sessions/training for all staff.
4	Partner with Public Agencies, Stakeholder Groups, & Business	Number of meetings with Permit Streamlining Task Force subcommittee and stakeholders.	Conduct 4 meetings of the Permit Streamlining Task Force subcommittee and stakeholders.
5	IT Systems Improvements	Number of completed Enterprise GIS improvement projects.	Complete 9 of the 15 Enterprise GIS projects identified in the Enterprise GIS Implementation Plan.
6	Timely Financial Monitoring	Timely budgetary financial reporting.	Submit quarterly budgetary financial reports to the Governing Board within 6 working days of the end of the quarter.



# SCAQMD General & Special Revenue Funds - Expenditures

**FY 2015-16  
Expenditures  
(Audited)**

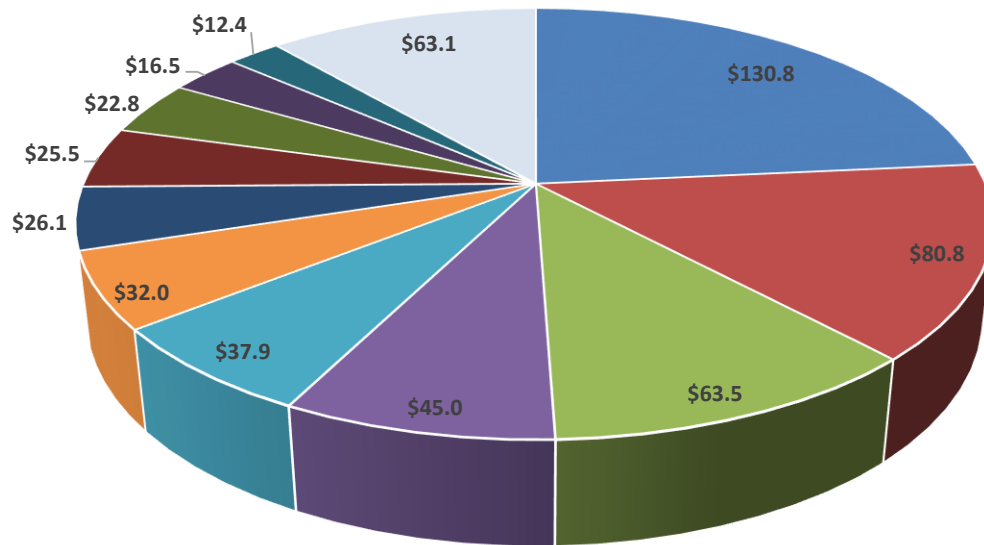


- General Fund
- Clean Fuels
- Prop 1B - Good Movement
- MSRC
- Moyer AB 923
- Other Special Revenue Funds

Fund	Amount	Activities
General Fund	\$138.0M	Compliance, Monitoring, Permits, Policy, etc.
Clean Fuels	\$14.5M	Clean fuels stationary & mobile source projects
Prop 1B Goods Movement Fund	\$9.9M	Goods movement emission reduction projects
MSRC	\$9.7M	Provides grants to fund projects for the purpose of reducing air pollution from motor vehicles
AB 923 Carl Moyer Program Fund	\$3.8M	Motor vehicle emission reduction projects
Other Funds (AB 1318, Carl Moyer Program, etc.)	\$29.9M	Various emission reduction programs and projects (zero/near zero emissions, solar/weatherization, vehicle/locomotive/marine emissions, etc.)

# SCAQMD General & Special Revenue Funds – Balances

FY 2015-16 Balances



- Moyer AB 923
- MSRC
- General Fund
- Clean Fuels
- Carl Moyer
- AB 1318 Mitigation Fees
- Prop 1B Goods Movement
- Air Quality Investment
- Rule 1118 Mitigation
- BP Arco
- Adv. Tech. Goods Movement
- Other

Fud	Balance
AB 923 - Carl Moyer Program	\$130.8M
MSRC	\$80.8M
General Fund	63.5M
Clean Fuels	\$45.0M
Carl Moyer Program	\$37.9M
AB 1318 Mitigation	\$32.0M
Prop 1B – Goods Movement	\$26.1M
Air Quality Investment	\$25.5M
Rule 1118 Mitigation	\$22.8M
BP Arco	\$16.5M
Adv. Tech. – Goods Movement	\$12.4M
Other Funds (Air Toxics, Lower Emission School Bus, Rule 1309.1 Priority Reserve, etc.)	\$63.1M

# FY 2017-18 General Fund Budget Summary

	FY 2016-17			FY 2017-18
	<u>Budget</u>	<u>Amended*</u>	<u>Estimate</u>	<u>Proposed</u>
<b>Revenue**</b>	\$136.4	\$143.5	\$146.5	\$147.5
<b>Program Cost</b>	<u>\$141.5</u>	<u>\$150.2</u>	<u>\$145.2</u>	<u>\$149.9</u>
<b>Change to Fund Balance</b>	<u>-\$5.1</u>	<u>-\$6.7</u>	<u>\$1.3</u>	<u>-\$2.4</u>

\*Board approved changes through March 2017.

\*\*FY 2017-18 Proposed Revenue Budget includes a projected CPI fee increase of 2.5% with an additional 16% increase for Title V annual operating permit renewal and permit processing fees and an additional 4% for Non-Title V annual operating permit renewal and permit processing fees.

# FY 2017-18 General Fund Budget Five Year Projection

(\$ in millions)	FY 16-17 Estimate	FY 17-18 Projected	FY 18-19 Projected	FY 19-20 Projected	FY 20-21 Projected	FY 21-22 Projected
STAFFING		825.25	825	825	825	825
Revenues	\$ 146.5	\$ 147.5	\$ 151.5	\$ 151.1	\$ 151.6	\$ 152.8
Program Costs	\$ 145.2	\$ 149.9	\$ 155.5	\$ 155.1	\$ 156.1	\$ 156.8
Change in Fund Balance	\$ 1.3	\$ (2.4)	\$ (4.0)	\$ (4.0)	\$ (4.5)	\$ (4.0)
UNRESERVED FUND BALANCE (at Year-End)	\$ 38.5	\$ 36.1	\$ 32.1	\$ 28.2	\$ 23.7	\$ 19.6
% of REVENUE	26%	24%	21%	19%	16%	13%

\*Includes projected CPI fee increase of 2.5% for FY 2017-18 with an additional 16% for Title V annual operating permit renewal and permit processing fees and an additional 4% for non-Title V annual operating permit renewal and permit processing fees; a CPI of 2.6% for FY 2018-19 with an additional 16% for Title V annual operating permit renewal and permit processing fees and an additional 4% for non-Title V annual operating permit renewal and permit processing fees; a CPI of 2.4% for FY 2019-20; and a CPI of 2.3% for FY 2020-21 and FY 2021-22.

# Proposed Amended Regulation (PAR) III

## Fees

- Proposed amendments to Reg. III consist of the following four (4) components:
  - CPI - 2.5% inflation-based adjustment (FY 17-18)
  - Non-Title V permit-related services - 8% partial cost recovery (4% in FY 17-18 & 4% in FY 18-19)
  - Title V permit-related services - 32% cost recovery (16% in FY 17-18 & 16% in FY 18-19)
  - Administrative (updates with no fiscal impact)

# Proposed Fees by Schedule

FY 2017-18 Proposed Permit Processing Fee Increases						
Schedule	FY 2016-17 Fee	2.5% CPI	16% Title V Above CPI	4% Above CPI Non-Title V	FY 17-18 Proposed Fee	Total Fee Increase
A & A1	\$ 1,557.83	\$ 38.95		\$ 63.87	\$ 1,660.65	\$ 102.82
A & A1 - Title V	\$ 1,557.83	\$ 38.95	\$ 255.48		\$ 1,852.26	\$ 294.43
B	\$ 2,482.82	\$ 62.07		\$ 101.80	\$ 2,646.69	\$ 163.87
B - Title V	\$ 2,482.82	\$ 62.07	\$ 407.18		\$ 2,952.07	\$ 469.25
B1 & C	\$ 3,927.10	\$ 98.18		\$ 161.01	\$ 4,186.29	\$ 259.19
B1 & C - Title V	\$ 3,927.10	\$ 98.18	\$ 644.04		\$ 4,669.32	\$ 742.22
D	\$ 5,420.06	\$ 135.50		\$ 222.22	\$ 5,777.78	\$ 357.72
D - Title V	\$ 5,420.06	\$ 135.50	\$ 888.89		\$ 6,444.45	\$ 1,024.39
E	\$ 6,231.43	\$ 155.79		\$ 255.49	\$ 6,642.70	\$ 411.27
E - Title V	\$ 6,231.43	\$ 155.79	\$ 1,021.95		\$ 7,409.17	\$ 1,177.74
F + (T&M)	\$ 15,659.93	\$ 391.50		\$ 642.06	\$ 16,693.49	\$ 1,033.56
F - Title V + (T&M)	\$ 15,659.93	\$ 391.50	\$ 2,568.23		\$ 18,619.66	\$ 2,959.73
G + (T&M)	\$ 18,483.59	\$ 462.09		\$ 757.83	\$ 19,703.51	\$ 1,219.92
G - Title V + (T&M)	\$ 18,483.59	\$ 462.09	\$ 3,031.31		\$ 21,976.99	\$ 3,493.40
H + (T&M)	\$ 28,642.06	\$ 716.05		\$ 1,174.32	\$ 30,532.44	\$ 1,890.38
H - Title V + (T&M)	\$ 28,642.06	\$ 716.05	\$ 4,697.30		\$ 34,055.41	\$ 5,413.35

FY 2017-18 Proposed Annual Renewal Fee Increases						
Schedule	FY 16-17 Fee	2.5% CPI	16% Title V Above CPI	4% Above CPI Non-Title V	FY 17-18 Proposed Fee	Total Fee Increase
A1	\$ 177.09	\$ 4.43		\$ 7.26	\$ 188.78	\$ 11.69
A1-Title V	\$ 177.09	\$ 4.43	\$ 29.05		\$ 210.57	\$ 33.48
A, B, & B1	\$ 354.86	\$ 8.87		\$ 14.55	\$ 378.28	\$ 23.42
A, B, & B1 - Title V	\$ 354.86	\$ 8.87	\$ 58.21		\$ 421.94	\$ 67.08
C & D	\$ 1,270.97	\$ 31.77		\$ 52.11	\$ 1,354.85	\$ 83.88
C & D - Title V	\$ 1,270.97	\$ 31.77	\$ 208.49		\$ 1,511.23	\$ 240.26
E,F,G, & H	\$ 3,051.76	\$ 76.29		\$ 125.12	\$ 3,253.18	\$ 201.42
E,F,G, & H - Title V	\$ 3,051.76	\$ 76.29	\$ 500.60		\$ 3,628.66	\$ 576.90
Title V - Flat Fee	\$ 514.49	\$ 12.86	\$ 84.40		\$ 611.75	\$ 97.26
R461	\$ 104.91	\$ 2.62		\$ 4.30	\$ 111.83	\$ 6.92

# Examples – 1<sup>st</sup> Year

## Permit Processing Fees (6.5% Non-Title V + 18.5% Title V)

Equipment Schedule	Equipment Type	Current Fee	FY 2017-18 Proposed Fee Increase
<u>Non-Title V:</u>			
A	Dry Cleaning Equipment	\$1,557.83	\$102.82
C	Boiler (5-20 MMBTU/hr) Natural Gas Fired	\$3,927.10	\$259.19
E	Asphalt Blending/Batching	\$6,231.43	\$411.27
<u>Title V:</u>			
A	Storage Tank, Fuel Oil	\$1,557.83	\$294.43
C	Boiler (5-20 MMBTU/hr) Natural Gas Fired	\$3,927.10	\$742.22
E	Crude Oil Distillation Unit	\$6,231.43	\$1,177.74

# Examples – 1<sup>st</sup> Year

## Annual Operating Permit Fees (6.5% Non-Title V + 18.5% Title V)

Equipment Schedule	Equipment Type	Current Fee	FY 2017-18 Proposed Fee Increase
<u>Non-Title V:</u>			
A	Dry Cleaning Equipment	\$354.86	\$23.42
C	Boiler (5-20 MMBTU/hr) Natural Gas Fired	\$1,270.97	\$83.88
E	Asphalt Blending/Batching	\$3,051.76	\$201.42
<u>Title V:</u>			
A	Storage Tank, Fuel Oil	\$354.86	\$67.07
C	Boiler (5-20 MMBTU/hr) Natural Gas Fired	\$1,270.97	\$240.21
E	Crude Oil Distillation Unit	\$3,051.76	\$576.78



# FY 2017-18 General Fund Budget

## Five Year Projection With Only 2.5% CPI Fee Increase

(\$ in millions)	FY 16-17 Estimate	FY 17-18 Projected	FY 18-19 Projected	FY 19-20 Projected	FY 20-21 Projected	FY 21-22 Projected
STAFFING		825	825	825	825	825
Revenues	\$ 146.5	\$ 143.9	\$ 143.8	\$ 143.2	\$ 143.6	\$ 144.7
Program Costs	\$ 145.2	\$ 149.9	\$ 155.5	\$ 155.1	\$ 156.1	\$ 156.8
Change in Fund Balance	\$ 1.3	\$ (6.0)	\$ (11.7)	\$ (11.9)	\$ (12.5)	\$ (12.1)
UNRESERVED FUND BALANCE (at Year-End)	\$ 38.5	\$ 32.5	\$ 20.8	\$ 8.8	\$ (3.7)	\$ (15.8)
% of REVENUE	26%	23%	14%	6%	-3%	-11%

# Summary of Key Dates

Date	Action
January 20	Budget Advisory Committee Meeting
March 15	Socioeconomic Report made available to public
April 6	Budget Advisory Committee Meeting
April 11 & 18	Public Consultation Meetings: Proposed Draft Budget/Proposed Amended Regulation (PAR) III - Fees
April 15	Budget Advisory Committee Recommendations, Public Comments & SCAQMD Responses pursuant to Rule 320 due to Governing Board
April 21	Board Workshop: Proposed Draft Budget/PAR III - Fees
April 25	Final due date for Budget Advisory Committee Recommendations & Public Comments on proposed fee increases and administrative amendments
June 2	Public Hearing; Budget, PAR III - Fees Approval

Questions/Comments?

BOARD MEETING DATE: June 2, 2017

AGENDA NO. 29

**PROPOSAL:** Certify the Final Subsequent Environmental Assessment and Amend Rule 1147 - NOx Reductions from Miscellaneous Sources

**SYNOPSIS:** SCAQMD staff is proposing to amend Rule 1147 to reflect the recommendations made in the Final Rule 1147 Technology Assessment. Proposed Amended Rule 1147 would allow in-use equipment with NOx emissions less than one pound per day to defer compliance with applicable emission limits until the unit is replaced or the burner is replaced. The proposed amended rule would also increase the NOx emission limit for certain equipment categories that were identified in the Final Rule 1147 Technology Assessment and exempt new and existing equipment rated at less than 325,000 Btu per hour from the emissions limits of the rule. The proposed amended rule also provides options to demonstrate compliance and other minor changes are to improve clarity. PAR 1147 is expected to result in NOx emission reductions delay of up to 0.9 tons per day. However, the emission reductions will begin to be recaptured starting in 2017 because the existing units will be regularly replaced and upgraded over time, leaving less than 0.03 tons per day NOx emissions reductions foregone associated with the less than 325,000 Btu per hour exemption.

**COMMITTEE:** Stationary Source, April 21, 2017, Reviewed

**RECOMMENDED ACTIONS:**

Adopt the attached Resolution:

1. Certifying the Final Subsequent Environmental Assessment for Proposed Amended Rule 1147 - NOx Reductions from Miscellaneous Sources; and,
2. Amending Rule 1147 - NOx Reductions from Miscellaneous Sources.

Wayne Nastri  
Executive Officer

## **Background**

Rule 1147 – NO<sub>x</sub> Reductions from Miscellaneous Sources, was adopted by the SCAQMD Board on December 5, 2008 with a compliance schedule phased in over 10 years. Rule 1147 incorporates two 2007 AQMP control measures: CMB-01 – NO<sub>x</sub> Reductions from Non-RECLAIM Ovens, Dryers and Furnaces; and MCS-01 – Facility Modernization. Rule 1147 was amended in September 2011 to delay implementation dates up to two years, remove a requirement for fuel or time meters and provide compliance flexibility for small and large sources. Rule 1147 includes a requirement for a technology assessment on the availability of low-NO<sub>x</sub> burner systems and their cost for processes with NO<sub>x</sub> emissions of one pound per day or less and that are not typically subject to a BACT requirement as new sources.

## **Technology Assessment**

Initially the SCAQMD technology assessment focused on sources in which the burner technology was either not available or the retrofit cost was comparable to the cost of replacing the unit. Several categories of equipment, including construction and portable equipment, were identified and removed from Rule 1147 because the requirement for a permit was removed through the May 2013 amendments to SCAQMD Rules 219 and 222. Staff continued the technical evaluation and developed Rule 1153.1 – Emissions of Oxides of Nitrogen from Commercial Food Ovens to move existing in-use food ovens, roasters and smokehouses from Rule 1147 into a separate rule. Rule 1153.1 was adopted on November 7, 2014 and provided more appropriate temperature ranges for defining emission limits, food oven specific emission limits, later compliance dates and an exemption for small units.

The last phase of the Technology Assessment focused on the remaining categories of small and low emission equipment that were not addressed through the Rule 219, 222 and 1153.1 rulemaking efforts. While the Technology Assessment focused on equipment with NO<sub>x</sub> emissions of 1 pound per day or less, the report also included information and analysis applicable to larger units. This information was included to address stakeholder concerns regarding the availability of technology for larger equipment.

With the exception of a few categories of equipment, the technology review demonstrated that low-NO<sub>x</sub> burner systems were available for every category of equipment subject to Rule 1147 and have been since the late 1990's. However, staff has identified three types of equipment for which low-NO<sub>x</sub> burners that achieve rule emission limits are not available or that cannot be retrofitted: 1) low-temperature ovens and dryers with heat inputs of less than 325,000 Btu per hour (0.325 mmBtu/hour) cannot comply with a 30 ppm emission limit but could comply with a higher limit; 2) existing heated process tanks, evaporators and parts washers cannot be retrofitted to meet an emission limit; and 3) low-temperature burn-off ovens and incinerators cannot comply with an emission limit of 30 ppm with the preferred burners.

**Affected Facilities**

Proposed Amended Rule (PAR) 1147 affects manufacturers, distributors and wholesalers of combustion equipment, as well as owners and operators of ovens, dryers, furnaces, and other equipment in the District. The units affected by the proposed rule are used in industrial, commercial and institutional settings for a wide variety of processes. Some examples of the processes regulated by the rule include metal casting and forging, coating and curing operations, asphalt manufacturing, and printing.

Based on permitted equipment in SCAQMD databases, staff estimates that as many as 6,400 pieces of equipment are potentially subject to Rule 1147 requirements. More than half of the units (~ 3,400) are spray booths and prep-stations. Excluding spray booths and prep-stations, staff estimates that at least one quarter of the remaining units in each category will meet Rule 1147 emission limits without retrofitting burners. Staff estimates that 4,900 to 5,650 out of 6,400 units are affected by proposed changes to Rule 1147.

**Public Process**

For this rule amendment, staff held two Task Force meetings on January 17 and April 20, 2017 with representatives from businesses, manufacturers, trade organizations and other interested parties. During development of the Rule 1147 Technology Assessment, staff held several Task Force meetings every year since January 2012 to receive stakeholder input. In addition, staff has had individual meetings with stakeholders, and visited local businesses to observe operations and equipment covered by Rule 1147. A Public Workshop and CEQA scoping meeting for PAR 1147 was held on February 15, 2017.

**Summary of Proposal**

As a result of the technology assessment and discussions with stakeholders, the proposed amendments recognize technical and economic challenges for affected industries and provide additional relief from existing rule requirements. The following changes are proposed for Rule 1147:

- Exempt sources with total rated heat input less than 325,000 Btu per hour from the Rule 1147 NOx emission limit.
- Change the NOx emission limit from 30 ppm to 60 ppm NOx for the primary chamber of all burn-off ovens, burnout furnaces and incinerators.
- Exempt units with emissions less than 1 pound per day from complying with the NOx emission limit when an entire facility is relocated.
- Exempt equipment with direct-fired infrared burners from the requirement to conduct an emissions test.
- Add an exemption for units that become subject to the rule upon amendment of Rule 219.

- Provide an option for small units with heat input equal to or less than 2 million Btu/hour to demonstrate compliance with an emission limit through a burner manufacturer's warranty.
- Delay compliance for existing in-use heated process tanks, evaporators and parts washers from the NOx emission limit until such time the combustion system or tank is modified or replaced.
- Delay compliance with the NOx emission limit for existing in-use spray booths until the unit is replaced or becomes 30 years old, or the heating system is modified (affecting the heat input rating) or replaced.
- Delay compliance with the NOx emission limit for existing in-use units with actual NOx emissions of one pound per day or less until the combustion system is modified (affecting the heat input rating) or replaced, or the unit is replaced or becomes 30 years old.
- Clarify existing exemptions, definitions, and recordkeeping options.

The proposed amendments will provide affected businesses additional flexibility and will reduce cost.

### **Emission Reductions**

If implemented, PAR 1147 is expected to result in delayed NOx emission reductions of up to 0.9 tons per day. Staff estimates that less than 0.05 ton/day of NOx emissions will be forgone because of the proposed changes to emission limits and exemptions including about 0.03 ton/day from the emission limit exemption for units rated less than 325,000 Btu per hour. However, with the exception of these emission reductions forgone, the remainder of the 0.9 tons per day will be made up as new rule-compliant equipment replaces existing units.

### **Key Issues**

Throughout the finalization of the Rule 1147 Technology Assessment and the rule development process, staff has worked with stakeholders to address key issues. At the Stationary Source Committee on April 21, 2017, a business owner commented about temperature control issues with their low-NOx heater in their spray booth. The burner manufacturer has worked with the business owner and provided suggestions to address operating issues, and has offered to replace the burner with a more appropriately sized burner at no cost. Staff reported to the Board on May 5, 2017 that based on an informal survey of 72 businesses with spray booths using the same low NOx heaters, 68 businesses indicated that overheating was not a problem.

SCAQMD staff has committed to developing outreach material that provides a simple summary of rule requirements. Staff has already begun working with stakeholders to discuss the type of outreach material, distribution options, and general information that would be included to provide effective outreach to facility owners and operators.

### **AQMP and Legal Mandates**

The California Health and Safety Code requires the SCAQMD to adopt an Air Quality Management Plan to meet state and federal ambient air quality standards and adopt rules and regulations that carry out the objectives of the AQMP. The Health and Safety Code also requires the SCAQMD to implement all feasible measures to reduce air pollution. Control Measure MCS-01 of the 2007 AQMP proposed that existing in-use equipment meet Best Available Control Technology (BACT) emission limits in place at the time the 2007 AQMP was adopted. Control Measure CMB-01 of the 2007 AQMP proposed emission NO<sub>x</sub> limits in the range of 20 ppm to 60 ppm for ovens, dryers, kilns, furnaces and other combustion equipment.

Rule 1147 relies on feasible technologies to further reduce NO<sub>x</sub> emissions to achieve the emission reductions proposed in the 2007 AQMP control measures. Rule 1147 anticipated reductions have already been reviewed and approved by both CARB and U.S. EPA and incorporated into the State Implementation Plan (SIP) as commitments, obligating SCAQMD to meet the emission reduction commitment attributed to the original rule and the 2011 amendment. The SCAQMD is required to cover any potential shortfall in emission reductions that may result from PAR 1147 or future amendments, if such a shortfall would interfere with reasonable further progress or attainment.

### **California Environmental Quality Act Analysis**

The proposed amendments to Rule 1147 (PAR 1147) are considered to be modifications to a previously approved project (the adoption of Rule 1147 on December 5, 2008 and the amendments to Rule 1147 on September 9, 2011) and are considered to be a “project” as defined by the California Environmental Quality Act (CEQA). Therefore, a Subsequent Environmental Assessment (SEA) is the appropriate CEQA document. The previous CEQA documents to the SEA are publicly available upon request and can be reviewed by calling the SCAQMD Public Information Center at (909) 396-2001 or by visiting SCAQMD’s website at [www.aqmd.gov](http://www.aqmd.gov). The direct links to these documents are also referenced in the Final SEA. Based on SCAQMD staff’s review of PAR 1147, the proposed project has the potential to generate significant adverse operational air quality impacts but that it would not generate significant adverse environmental impacts to any other environmental topic areas.

The Draft SEA was released for a 46-day public review and comment period from March 24, 2017 to May 9, 2017. Two comment letters were received and responses to the comments have been prepared. The comment letters and responses are included in an appendix to the Final SEA (see Appendix F). Since the release of the Draft SEA, minor modifications were made to PAR 1147 and some of the revisions were made in response to verbal and written comments on the project’s effects. Staff has reviewed the modifications to PAR 1147 and concluded that none of the modifications constitute significant new information or a substantial increase in the severity of an environmental impact, nor provide new information of substantial importance relative to the draft document. In addition, revisions to PAR 1147 in response to verbal or written



comments would not create new, significant effects. As a result, these minor revisions do not require recirculation of the Draft SEA pursuant to CEQA Guidelines § 15088.5. Thus, the Draft SEA has been revised to reflect the aforementioned modifications and to include the comment letters and responses to comments such that it is now a Final SEA (see Attachment H of this Board package).

Prior to making a decision on the adoption of PAR 1147, the SCAQMD Board must review and certify the Final SEA as providing adequate information on the potential adverse environmental impacts that may occur as a result of adopting PAR 1147.

### **Socioeconomic Analysis**

The proposed amendments would extend the compliance schedule, make some emission limits less stringent, provide additional exemptions, and reduce emission testing requirements. These proposed amendments are based on technical feasibility considerations that were validated through a technology assessment and provide flexibility. Compared to the current rule requirements, PAR 1147 would delay and/or reduce implementation costs to affected businesses and facilitate compliance, thus resulting in overall cost-savings.

### **Resource Impacts**

Existing staff resources are adequate to implement the proposed amended rule.

### **Attachments**

- A. Summary of Proposal
- B. Key Issues and Responses
- C. Rule Development Process
- D. Key Contacts List
- E. Resolution and Attachment 1 to the Resolution
- F. Proposed Amended Rule 1147
- G. Final Staff Report with Socioeconomic Impact Analysis
- H. Final Subsequent Environmental Assessment
- I. Board Meeting Presentation

**ATTACHMENT A**  
**SUMMARY OF PROPOSAL**

**Proposed Amended Rule 1147 - NO<sub>x</sub> Reductions from Miscellaneous Sources**

- Remove the requirement to comply with an emission limit for units with a heat input rating of less than 325,000 Btu/hour [ Table 1, (c)(1) ]. These units would still be subject to maintenance and recordkeeping requirements;
- Change the NO<sub>x</sub> emission limit for low-temperature afterburners, burn-off ovens, incinerators, and related equipment from 30 ppm to 60 ppm [ Table 1, (c)(1) ];
- Change the compliance date for small in-use units (with NO<sub>x</sub> emissions of less than one pound per day) from a schedule based on a 20-year lifetime to a 30-year lifetime or when the units are replaced or retrofit [ (c)(1) and (c)(6) ];
- Provide compliance flexibility for low-emission units by clarifying options for demonstrating emissions less than one pound per day [ (c)(6) ];
- Add flexibility for demonstrating compliance with emission limits including an alternative compliance demonstration option based on a manufacturer's performance guarantee [ (d)(1) – (d)(11) ];
- Change the compliance date for existing in-use heated process tanks and pressure washers from a schedule based on a 15-to-20-year lifetime to when the units are replaced or retrofit. These units would not be required to comply with an emission limit at any specific age and may be relocated with a facility move [ (g)(8) and (g)(11) ];
- Add a testing exemption for ultra-low NO<sub>x</sub> infrared burners [ (g)(9) ];
- Add an exemption for units that become subject to the rule upon amendment of Rule 219 [ (g)(10) ];
- Add an exemption for units with emission less than 1 pound per day when a company relocates a facility and remains under the same ownership [ (g)(11) ];
- Clarify an exemption for food ovens [ (a), (g)(1), and (g)(2) ]; and
- Clarify an exemption for flare type systems [ (g)(3)(E) ].

**ATTACHMENT B**  
**KEY ISSUES AND RESPONSES**

**Proposed Amended Rule 1147 - NO<sub>x</sub> Reductions from Miscellaneous Sources**

**Issue** – Low-NO<sub>x</sub> heaters for automobile refinishing spray booths

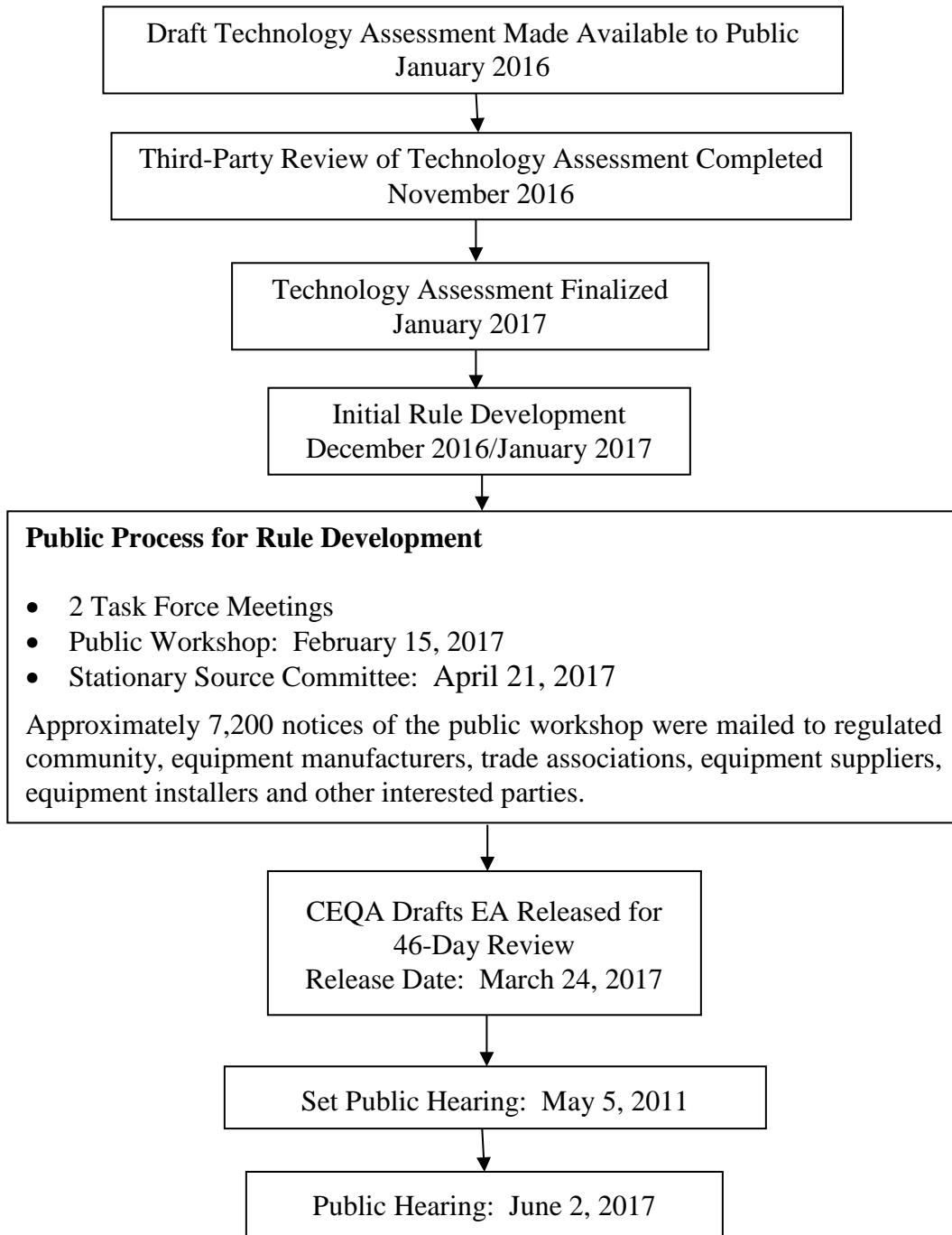
**Response:** *Concerns were raised by stakeholders regarding temperature control of low-NO<sub>x</sub> heaters for certified spray booth heaters and the availability of low-NO<sub>x</sub> burners from other suppliers. Staff conducted a survey of owners and operators of spray booths with low NO<sub>x</sub> heaters to determine if temperature control issues were common. The results of the survey indicated that overheating was not a common problem and may be related to temperature sensors and the heater temperature control systems purchased by individual operators. The company that provides the low NO<sub>x</sub> burner for 14 manufacturers of heaters also provided burners to the majority of these manufacturers before Rule 1147 was adopted. Two spray booth heaters using two other companies' burners have also demonstrated compliance with the rule emission limit through emission testing. These test results are summarized and discussed in the Rule 1147 Technology Assessment. Staff will continue to work with the business owner who experienced problems with their spray booth heater.*

**Issue** – Outreach to Businesses

**Response:** *SCAQMD staff has committed to developing an implementation guidance document to help businesses comply with rule requirements. In addition, staff will work with stakeholders to provide outreach materials after the rule is adopted. Staff has initiated this process and held one meeting with stakeholders.*

**ATTACHMENT C**  
**RULE DEVELOPMENT PROCESS**

**Proposed Amended Rule 1147 – NO<sub>x</sub> Reductions from Miscellaneous Sources**



**Seven (7) months spent in rule development and 5 years in technology assessment.**

**ATTACHMENT D**  
**KEY CONTACTS LIST**

AMVAC  
California Auto Body Association  
California Small Business Alliance  
E4 Strategic Solutions  
Eclipse  
ETS, Inc.  
Furnace Dynamics  
George T. Hall Company  
Handbill Printers  
IPE  
J.R. Sandoval Enterprises  
MAACO  
Maximum Technical Services  
Maxon Corporation  
Midco International  
Printing Industries Association of Southern California  
Relyon Technologies  
Southern California Gas Company  
U.S. EPA  
Wirth Gas Equipment, Inc.

## **ATTACHMENT E**

### **RESOLUTION NO. 17-\_\_\_\_\_**

**A Resolution of the Governing Board of the South Coast Air Quality Management District (SCAQMD) certifying the Final Subsequent Environmental Assessment for Proposed Amended Rule 1147 - NO<sub>x</sub> Reductions from Miscellaneous Sources.**

**A Resolution of the SCAQMD Governing Board amending Rule 1147 - NO<sub>x</sub> Reductions from Miscellaneous Sources.**

**WHEREAS**, the SCAQMD Governing Board finds and determines with certainty that Proposed Amended Rule 1147 is considered a modification to a previously approved project (the adoption of Rule 1147 on December 5, 2008 and the amendments to Rule 1147 on September 9, 2011) and is considered to be a “project” as defined by the California Environmental Quality Act (CEQA); and

**WHEREAS**, the SCAQMD has had its regulatory program certified pursuant to Public Resources Code § 21080.5 and CEQA Guidelines § 15251(l) and has conducted CEQA review and analysis pursuant to such program (SCAQMD Rule 110); and

**WHEREAS**, the SCAQMD staff reviewed Proposed Amended Rule 1147 and determined that it may have the potential to generate significant adverse environmental impacts; and

**WHEREAS**, the SCAQMD Governing Board has determined that the requirements for a Subsequent Environmental Impact Report (EIR) have been triggered pursuant to CEQA Guidelines § 15162, and that a Subsequent Environmental Assessment (SEA), a substitute document allowed pursuant to CEQA Guidelines § 15252 and SCAQMD’s certified regulatory program, is appropriate; and

**WHEREAS**, SCAQMD staff has prepared a Draft SEA pursuant to CEQA Guidelines § 15162 and its certified regulatory program and pursuant to CEQA Guidelines § 15252, setting forth the potential environmental consequences of Proposed Amended Rule 1147; and

**WHEREAS**, the Draft SEA was circulated for a 46-day public review and comment period from March 24, 2017 to May 9, 2017; and

**WHEREAS**, two comment letters were received relative to the analysis presented in the Draft SEA and responses were prepared for each individual comment in the letters. None of the comments in these comment letters identified other potentially significant adverse impacts from the proposed project, and the Draft SEA has been revised such that it is now a Final SEA; and

**WHEREAS**, it is necessary that the adequacy of the Final SEA, including responses to comments, be determined by the SCAQMD Governing Board prior to its certification; and

**WHEREAS**, it is necessary that the SCAQMD prepare Findings and a Statement of Overriding Considerations pursuant to CEQA Guidelines § 15091 and § 15093, respectively, regarding potentially significant adverse environmental impacts that cannot be mitigated to insignificance; and

**WHEREAS**, Findings and a Statement of Overriding Considerations have been prepared and are included in Attachment 1 to this Resolution, which is attached and incorporated herein by reference; and

**WHEREAS**, no feasible mitigation measures were identified to reduce or eliminate the significant adverse operational air quality impacts to less than significant and, as such, a Mitigation Monitoring Plan pursuant to Public Resources Code § 21081.6 is not required and was not prepared; and

**WHEREAS**, the Board package includes the Final SEA and other supporting documentation, and this information was presented to the SCAQMD Governing Board and that the Board has reviewed and considered the entirety of this information before approving the staff recommendations; and

**WHEREAS**, the SCAQMD Governing Board voting on Proposed Amended Rule 1147 has reviewed and considered the Final SEA, including responses to comments, the Findings, and Statement of Overriding Considerations, and all other supporting documentation, prior to the certification of the Final SEA; and

**WHEREAS**, the SCAQMD Governing Board finds and determines, taking into consideration the factors in Section (d)(4)(D) of the Governing Board Procedures (codified as Section 30.5(4)(D) of the Administrative Code), that the modifications which have been made to Proposed Amended Rule 1147, since notice of public hearing was published, do not significantly change the meaning of the proposed amended rule within the meaning of Health and Safety Code § 40726 and would not constitute significant new information requiring recirculation of the Draft SEA pursuant to CEQA Guidelines § 15088.5; and

**WHEREAS**, California Health and Safety Code § 40727 requires that prior to adopting, amending or repealing a rule or regulation, the SCAQMD Governing Board shall make findings of necessity, authority, clarity, consistency, non-duplication, and reference based on relevant information presented at the public hearing and in the staff report; and

**WHEREAS**, the SCAQMD Governing Board obtains its authority to adopt, amend, or repeal rules and regulations from §§ 39002, 40000, 40001, 40440, 40441, 40702, 40725 through 40728, 41508, and 41700 of the California Health and Safety Code; and

**WHEREAS**, the SCAQMD Governing Board has determined that there is a problem that Proposed Amended Rule 1147 will help alleviate by delaying the NOx emission limit compliance dates and changing NOx emission limits to address feasibility issues; and

**WHEREAS**, the SCAQMD Governing Board has determined that a need exists to amend Rule 1147 to delay the NOx emission limit compliance dates and change NOx emission limits to address feasibility issues; and

**WHEREAS**, the SCAQMD Governing Board has determined that Proposed Amended Rule 1147, as proposed is written or displayed so that its meaning can be easily understood by the persons directly affected by it; and

**WHEREAS**, the SCAQMD Governing Board has determined that Proposed Amended Rule 1147, as proposed, is in harmony with, and not in conflict with or contradictory to, existing federal or state statutes, court decisions, or regulations; and

**WHEREAS**, the SCAQMD Governing Board has determined that Proposed Amended Rule 1147, as proposed, does not impose the same requirements as any existing state or federal regulation and the proposed amended rule is necessary and proper to execute the powers and duties granted to, and imposed upon, the District; and

**WHEREAS**, the SCAQMD Governing Board has determined that Proposed Amended Rule 1147, as proposed, references the following statutes which the SCAQMD hereby implements, interprets or makes specific: Health and Safety Code 40001(a) (rules to meet air quality standards); 40440(a) (rules to carry out the plan); 40702 (adoption of rules and regulations); and



**WHEREAS**, the SCAQMD Governing Board finds that Proposed Amended Rule 1147 does not impose a new emission limit or standard, make an existing emission limit or standard more stringent, or impose new or more stringent requirements and that Proposed Amended Rule 1147 falls within one or more subcategories of Health and Safety Code § 40727.2; and

**WHEREAS**, the SCAQMD Governing Board has determined that the Socioeconomic Impact Assessment of Proposed Amended Rule 1147 is consistent with the March 17, 1989 Governing Board Socioeconomic Resolution for rule adoption; and

**WHEREAS**, the SCAQMD Governing Board has determined that Proposed Amended Rule 1147 will result in cost savings to the affected owner/operators as analyzed in the Socioeconomic Impact Assessment, as contained in the Final Staff Report; and

**WHEREAS**, the SCAQMD Board has actively considered the Socioeconomic Impact Assessment, as contained in the Final Staff Report, and has made a good faith effort to minimize any adverse socioeconomic impacts; and

**WHEREAS**, the SCAQMD Governing Board has determined that the Socioeconomic Impact Assessment is consistent with the provisions of the Health and Safety Code Sections 40440.8, 40728.5, 40920.6; and

**WHEREAS**, the SCAQMD Governing Board has determined that Proposed Amended Rule 1147 will not result in increased costs; and

**WHEREAS**, the SCAQMD Governing Board has determined that Proposed Amended Rule 1147 will not result in emission reductions, and therefore no incremental cost analysis is required under Health and Safety Code § 40920.6; and

**WHEREAS**, a public hearing has been properly noticed in accordance with the provisions of Health and Safety Code § 40725; and

**WHEREAS**, the SCAQMD Governing Board has held a public hearing in accordance with all provisions of law; and

**WHEREAS**, the SCAQMD Governing Board specifies the Manager of Proposed Amended Rule 1147 as the custodian of the documents or other materials which constitute the record of proceedings upon which the adoption of this proposed project is based, which are located at the South Coast Air Quality Management District, 21865 Copley Drive, Diamond Bar, California; and

**NOW, THEREFORE, BE IT RESOLVED**, that the SCAQMD Governing Board does hereby certify the Final SEA for Proposed Amended Rule 1147, including responses to comments and other supporting documentation, was completed in compliance with CEQA; and finds that the Final SEA was presented to the Governing Board, whose members reviewed, considered and approved the information therein prior to acting on Proposed Amended Rule 1147, and finds that the Final SEA reflects the SCAQMD's independent judgment and analysis; and

**BE IT FURTHER RESOLVED**, that the SCAQMD Governing Board adopts the Findings and Statement of Overriding Considerations pursuant to CEQA Guidelines § 15091 and § 15093, respectively, as required by CEQA and which are included in Attachment 1 to this Resolution and incorporated herein by reference; and

**BE IT FURTHER RESOLVED**, since no feasible mitigation measures were identified to reduce or eliminate the significant adverse operational air quality impacts to less than significant, a Mitigation Monitoring Plan pursuant to Public Resources Code § 21081.6 and CEQA Guidelines § 15097 is not required and was not prepared; and

**BE IT FURTHER RESOLVED**, that the SCAQMD Governing Board requests that Proposed Amended Rule 1147 be submitted into the State Implementation Plan; and

**BE IT FURTHER RESOLVED**, that the Executive Officer is hereby directed to forward a copy of this Resolution and Proposed Amended Rule 1147 to the California Air Resources Board for approval and subsequent submittal to the U.S. Environmental Protection Agency for inclusion into the State Implementation Plan; and

**BE IT FURTHER RESOLVED**, that the SCAQMD Governing Board hereby directs staff to work with stakeholders to conduct outreach and help guide facilities subject to Rule 1147 through the applicable rule requirements; and

**BE IT FURTHER RESOLVED**, that the SCAQMD Governing Board does hereby adopt, pursuant to the authority granted by law, amendments to Rule 1147 - NOx Reductions from Miscellaneous Sources, as set forth in the attached and incorporated herein by reference.

Dated: \_\_\_\_\_

\_\_\_\_\_  
Clerk of the District Boards

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>
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**Attachment 1 to the Governing Board Resolution for:  
Final Subsequent Environmental Assessment to the December 2008 Final Environmental  
Assessment for Proposed Rule 1147 – NOx Reductions from Miscellaneous Sources, and  
to the September 2011 Final Subsequent Environmental Assessment for Proposed  
Amended Rule 1147 – NOx Reductions from Miscellaneous Sources**

**Findings and Statement of Overriding Considerations**

**SCAQMD No. 03172017SW  
State Clearinghouse No: 2009061088**

**May 2017**

**Executive Officer**  
Wayne Nastri

**Deputy Executive Officer**  
**Planning, Rule Development and Area Sources**  
Philip Fine, Ph.D.

**Assistant Deputy Executive Officer**  
**Planning, Rule Development and Area Sources**  
Susan Nakamura

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William Wong Principal Deputy District Counsel

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
GOVERNING BOARD**

**CHAIRMAN:** DR. WILLIAM A. BURKE  
Speaker of the Assembly Appointee

**VICE CHAIRMAN:** BEN BENOIT  
Mayor Pro Tem, Wildomar  
Cities of Riverside County

**MEMBERS:**

MARION ASHLEY  
Supervisor, Fifth District  
County of Riverside

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Mayor, South Pasadena  
Cities of Los Angeles County/Eastern Region

JOSEPH K. LYOU, Ph. D.  
Governor's Appointee

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Mayor Pro Tem, Highland  
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Councilmember, Rolling Hills Estates  
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County of Orange

DR. CLARK E. PARKER, SR.  
Senate Rules Committee Appointee

DWIGHT ROBINSON  
Councilmember, Lake Forest  
Cities of Orange County

JANICE RUTHERFORD  
Supervisor, Second District  
County of San Bernardino

**EXECUTIVE OFFICER:**  
WAYNE NASTRI

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## **INTRODUCTION**

The proposed amendments to Rule 1147 - NO<sub>x</sub> Reductions From Miscellaneous Sources, are considered a “project” as defined by the California Environmental Quality Act (CEQA) (California Public Resources Code §§ 21000 et seq.). The SCAQMD as Lead Agency for the proposed project, prepared a Notice of Preparation/Initial Study (NOP/IS) which identified environmental topics to be analyzed in a Draft Environmental Assessment (EA). Since PAR 1147 was identified in the NOP/IS as potentially having statewide, regional or areawide significance, a CEQA scoping meeting is required (pursuant to Public Resources Code Section 21083.9(a)(2)) and was held at the SCAQMD’s Headquarters in conjunction with the Public Workshop on February 15, 2017.

The NOP/IS provided information about the proposed project to other public agencies and interested parties prior to the intended release of the Draft EA. The NOP/IS was distributed to responsible agencies and interested parties for a 30-day review and comment period from February 1, 2017, to March 3, 2017. The initial evaluation in the NOP/IS identified the topic of operational air quality as potentially having potentially significant adverse impacts requiring further review. During the public comment period, the SCAQMD received two comment letters relative to the NOP/IS.

Following the release of the NOP/IS, further analysis of the proposed project indicated that the type of CEQA document appropriate for the proposed project is a Subsequent Environmental Assessment (SEA), in lieu of an EA. The SEA is a substitute CEQA document, prepared in lieu of a Subsequent EIR (CEQA Guidelines § 15162(b)), pursuant to the SCAQMD’s Certified Regulatory Program (CEQA Guidelines § 15251(l); codified in SCAQMD Rule 110). . Therefore, a SEA is appropriate because new information of substantial importance, which was not known and could not have been known at the time the Final EA was certified for the adoption of Rule 1147 in December 2008 (referred to herein at the December 2008 Final EA) and the Final Subsequent EA that was certified for the amendments to Rule 1147 in September 2011 (referred to herein as the September 2011 Final SEA), became available (CEQA Guidelines § 15162(a)(3)). Further, PAR 1147 is expected to have significant effects that were not discussed in the previous December 2008 Final EA or September 2011 Final SEA (CEQA Guidelines § 15162(a)(3)(A)). In the event that new information becomes available that would change a project, the lead agency shall prepare a subsequent Environmental Impact Report (EIR) (CEQA Guidelines § 15162(b)). However, under SCAQMD's certified regulatory program, an equivalent document, a subsequent EA, can be a substitute for preparing a subsequent EIR.

The SEA is also a public disclosure document intended to: 1) provide the lead agency, responsible agencies, decision makers and the general public with information on the environmental impacts of the proposed project; and 2) be used as a tool by decision makers to facilitate decision making on the proposed project.

Thus, the SCAQMD, as lead agency for the proposed project, has prepared the Draft SEA pursuant to its Certified Regulatory Program. The Draft SEA identified and analyzed the topic of operational air quality as the only area that may have significant adverse impacts if the proposed project is implemented. The Draft SEA concluded that only the topic of operational air quality emission impacts would have significant adverse impacts. Because PAR 1147 may have statewide, regional or areawide significance, a CEQA scoping meeting was required for the proposed project pursuant to Public Resources Code § 21083.9(a)(2) and was held at the SCAQMD’s Headquarters in conjunction with the Public Workshop on February 15, 2017. Further, pursuant to CEQA Guidelines § 15252, since significant adverse impacts were identified,

an alternatives analysis and mitigation measures are required. However, since PAR 1147 contains adjustments to compliance dates for certain types of equipment and alternatives to the project that are either the ‘no project’ alternative, or different adjustments to the compliance dates than what is proposed in PAR 1147 (see Chapter 5 of the Final SEA), the analysis in the Final SEA concluded that there are no feasible mitigation measures that would eliminate or reduce the significant adverse operational air quality impacts for NO<sub>x</sub> emissions to less than significant levels.

The Draft SEA was released for a 46-day public review and comment period from March 24, 2017 to May 9, 2017. The comments made at the CEQA scoping meeting and the responses to these comments are included in Appendix D of this Final SEA. The comment letters received relative to the NOP/IS and the responses to the comments are included in Appendix E of the Final SEA. In addition, all comments received during the public comment period on the analysis presented in the Draft SEA have been responded to and included in Appendix F of the Final SEA.

Subsequent to release of the Draft SEA, modifications were made to PAR 1147 and some of the revisions were made in response to verbal and written comments on the project’s effects. At the time the Draft SEA was released for public review and comment, the estimate of total NO<sub>x</sub> emission reductions foregone of 0.9 ton per day included the portion of emission reductions foregone attributable to the original proposal to increase the NO<sub>x</sub> compliance limit for low temperature ovens and other units with a heat rating less than 325,000 BTU/hour until 2044. However, subsequent to the release of the Draft SEA, the proposed project was modified to fully exempt all units, not just low temperature units, in this category. The effect of exempting these units is now expected to have permanent, instead of temporary, NO<sub>x</sub> emission reductions foregone of approximately 49 pounds per day, which is less than the NO<sub>x</sub> significance threshold of 55 pounds per day. Staff has reviewed the modifications to PAR 1147 and concluded that none of the modifications constitute significant new information or a substantial increase in the severity of an environmental impact, nor provide new information of substantial importance relative to the draft document. In addition, revisions to PAR 1147 in response to verbal or written comments would not create new, avoidable significant effects. As a result, these revisions do not require recirculation of the Draft SEA pursuant to CEQA Guidelines § 15088.5.

## **SUMMARY OF THE PROPOSED PROJECT**

SCAQMD staff is proposing to amend Rule 1147 – NO<sub>x</sub> Reductions from Miscellaneous Sources, in order to resolve compliance issues that have been raised by stakeholders. If adopted, PAR 1147 would:

- remove the requirement to comply with the NO<sub>x</sub> emission limit for units with a heat input rating of less than 325,000 British Thermal Units per hour (BTU/hour). These units would still be subject to maintenance and recordkeeping requirements;
- change the NO<sub>x</sub> emission limit for low temperature afterburners, burn-off ovens, incinerators, and related equipment from 30 ppm to 60 ppm;
- change the compliance date for small in-use units (with NO<sub>x</sub> emissions of one pound per day or less) from a schedule based on a 20 year lifetime to a 30 year lifetime or until the units are replaced or retrofit;
- change the compliance date for existing in-use heated process tanks and pressure washers from a schedule based on a 15 year to 20 year lifetime to when the units are replaced or retrofit. These units would not be required to comply with an emission limit at any specific age and may be relocated with a facility move;

- add a testing exemption for ultra-low NO<sub>x</sub> infrared burners;
- provide compliance flexibility for low emission units by clarifying options for demonstrating emissions less than one pound per day;
- add an exemption for units with emission less than one pound per day when a company relocates a facility and remains under the same ownership;
- add an exemption for units that become subject to the rule upon amendment of Rule 219 on or after May 5, 2017, until the unit is replaced;
- add flexibility for demonstrating compliance with emission limits including an alternative compliance demonstration option based on a manufacturer's performance guarantee;
- clarify an exemption for food ovens; and
- clarify an exemption for flare type systems.

If adopted, PAR 1147 is expected to result in NO<sub>x</sub> emission reductions foregone of up to 0.9 ton per day in 2017. However, while most of the estimated NO<sub>x</sub> emission reductions foregone will be eventually recaptured because the existing units will be regularly replaced and upgraded over time, approximately 0.03 ton per day of the NO<sub>x</sub> emission reductions foregone will be permanent (see the Final SEA, Table 4-3). Other minor changes are also proposed for clarity and consistency throughout the rule.

#### **SIGNIFICANT ADVERSE IMPACTS WHICH CAN BE REDUCED BELOW A SIGNIFICANT LEVEL OR WERE CONCLUDED TO BE INSIGNIFICANT**

The Final SEA identified air quality as an area that may be adversely affected by the proposed project. The proposed project was evaluated according to the CEQA environmental checklist of approximately 17 environmental topics for potential adverse impacts from a proposed project. The screening analysis concluded that the following environmental areas would not be significantly adversely affected by the proposed project:

- aesthetics
- air quality and greenhouse gases during construction (and greenhouse gases during operation)
- agriculture and forestry resources
- biological resources
- cultural resources
- energy
- geology and soils
- hazards and hazardous materials
- hydrology and water quality
- land use and planning
- mineral resources
- noise



- population and housing
- public services
- recreation
- solid and hazardous waste
- transportation and traffic

## **POTENTIAL SIGNIFICANT ADVERSE IMPACTS THAT CANNOT BE REDUCED BELOW A SIGNIFICANT LEVEL**

The Final SEA identified the topic of operational air quality as the only area that may be significantly adversely affected by the proposed project.

### Operational Air Quality Impacts

Of the amendments proposed in PAR 1147, only the amendment to delay the compliance for NOx emission limits and the exempt units with a heat rating less than 325,000 BTU/hour would have significant adverse operational air quality impacts. The air quality analysis for PAR 1147 in the Final SEA indicates that NOx emission reductions delayed during operation will continue to exceed the NOx operational significance threshold for each compliance year in 2017 and beyond. Thus, the operational air quality impacts from implementing PAR 1147 are considered to be significant. If significant adverse environmental impacts are identified in a CEQA document, the CEQA document shall describe feasible measures that could minimize the impacts of the proposed project. However, since PAR 1147 contains adjustments to compliance dates for certain types of equipment and alternatives to the project that are either the ‘no project’ alternative, or different adjustments to the compliance dates than what is proposed in PAR 1147, there are no feasible mitigation measures that would eliminate or reduce the significant adverse operational air quality impacts for NOx emissions to less than significant levels.

It is important to note that because PAR 1147 focuses on reducing NOx emissions, emissions of other criteria pollutants (e.g., CO, VOC, SOx, PM10, and PM2.5) and toxic air contaminants are not expected to change as a result of PAR 1147 compared with the current requirements for the affected sources under Rule 1147. Thus, PAR 1147 will not result in significant adverse operational air quality impacts for CO, VOC, SOx, PM10, PM2.5 and toxic air contaminants.

## **FINDINGS**

Public Resources Code § 21081 and CEQA Guidelines § 15091(a) state that no public agency shall approve or carry out a project for which a CEQA document has been completed which identifies one or more significant adverse environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. Additionally, the findings must be supported by substantial evidence in the record (CEQA Guidelines § 15091(b)). As identified in the Final SEA and summarized above, the proposed project has the potential to create significant adverse operational air quality impacts. The SCAQMD Governing Board, therefore, makes the following findings regarding the proposed project. The findings are supported by substantial evidence in the record as explained in each finding. These Findings will be included in the record of project approval and will also be noted in the Notice of Decision. The Findings made by the SCAQMD Governing Board are based on the following significant adverse impact identified in the Final SEA.

**Potential NO<sub>x</sub> emission reductions delayed and permanently foregone exceed the SCAQMD's applicable significance air quality thresholds and cannot be mitigated to insignificance.**

Finding and Explanation:

As explained earlier, except for NO<sub>x</sub> emissions, no other criteria pollutant or toxic air contaminant emissions exceed the SCAQMD's applicable significance thresholds during operation. Thus, PAR 1147 is concluded to result in adverse significant operational NO<sub>x</sub> air quality impacts.

The Governing Board finds that there are no feasible mitigation measures that would eliminate or reduce the significant adverse operational air quality impacts for NO<sub>x</sub> emissions to less than significant levels. CEQA defines "feasible" as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors" (Public Resources Code § 21061.1).

The Governing Board finds further that the Final SEA considered alternatives pursuant to CEQA Guidelines § 15126.6, but, aside from the No Project Alternative, no project alternatives would reduce to insignificant levels the significant air quality impacts identified for the proposed project and still achieve the objectives of the proposed project. The administrative record for the CEQA document and adoption of the rule amendments is maintained by the Office of Planning, Rule Development and Area Sources.

Conclusion

The Governing Board finds that the findings required by CEQA Guidelines § 15091(a) are supported by substantial evidence in the record. The record of approval for this project may be found in the SCAQMD's Clerk of the Board's Office located at SCAQMD headquarters in Diamond Bar, California.

**STATEMENT OF OVERRIDING CONSIDERATIONS**

If significant adverse impacts of a proposed project remain after incorporating mitigation measures or no measures or alternatives to mitigate the adverse impacts are identified, the lead agency must make a determination that the benefits of the project outweigh the unavoidable adverse environmental effects if it is to approve the project. CEQA requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a proposed project against its unavoidable environmental risks when determining whether to approve the project [CEQA Guidelines § 15093(a)]. If the specific economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable" [CEQA Guidelines § 15093 (a)]. Accordingly, a Statement of Overriding Considerations regarding potentially significant adverse operational NO<sub>x</sub> air quality impacts resulting from the proposed project has been prepared. This Statement of Overriding Considerations is included as part of the record of the project approval for the proposed project. Pursuant to CEQA Guidelines § 15093(c), the Statement of Overriding Considerations will also be noted in the Notice of Decision for the proposed project.

Despite the inability to incorporate changes into the proposed project that will mitigate potentially significant adverse operational air quality impacts to a level of insignificance, the SCAQMD's

Governing Board finds that the following benefits and considerations outweigh the significant unavoidable adverse environmental impacts:

1. The analysis of potential adverse environmental impacts incorporates a “worst-case” approach. This entails the premise that whenever the analysis requires that assumptions be made, those assumptions that result in the greatest adverse impacts are typically chosen. This method likely overestimates the actual emission reductions delayed from the proposed project.
2. The potential adverse impacts from implementing PAR 1147 consist of delay in anticipated NOx emission reductions and small amount of permanent emission reduction foregone, not emission increases.
3. Despite the delay in some of the compliance dates, most NOx emission reductions foregone are expected to be recovered each year based on up to 0.9 ton per day from compliance year 2017 to 2044. The permanent emission reductions foregone are estimated to be 0.03 ton per day.
4. In consideration of the total net accumulated emission reductions projected overall, the delay in NOx emission reductions would not interfere with the air quality progress and attainment demonstration projected in the AQMP. The 2012 AQMP allocated one ton per day of NOx emissions in the SIP set aside account for every year starting in year 2013 to year 2030 in the event that NOx emission reductions were not achieved via rule adoptions or amendments. This NOx set aside account was re-evaluated and revised in the Final 2016 AQMP based on expected growth and the number of projects expected to take place in near future years to 2.0 tons per day for every year starting in year 2017 to year 2025 and 1.0 ton per day for every year starting in year 2026 to year 2031. As a result, even though PAR 1147 would delay NOx emission reductions and exempt some units, implementation of other control measures in the 2016 AQMP will provide human health benefits by reducing population exposures to existing NOx emissions. The cumulative air quality impacts from the proposed project and all other AQMP control measures, when considered together, are not expected to be significant because ongoing implementation of AQMP control measures is expected to result in net emission reductions and overall air quality improvement.
5. The proposed project will help relieve certain affected industries of the compliance challenges currently being experienced by certain affected sources with the existing Rule 1147 and ensures that equipment owners/operators are not unnecessarily burdened with compliance costs.

The SCAQMD’s Governing Board finds that the aforementioned considerations outweigh the unavoidable significant effects to the environment as a result of the proposed project.

#### **MITIGATION MONITORING PLAN**

When making findings as required by Public Resources Code § 21081 and CEQA Guidelines § 15091, the lead agency must adopt a reporting or monitoring program for the changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment (Public Resources Code § 21081.6 and CEQA Guidelines § 15097[a]). However, SCAQMD found there are no feasible mitigation measures that would eliminate or reduce the significant adverse operational air quality impacts for NOx emissions to

less than significant levels. Therefore, no mitigation monitoring plan has been developed for PAR 1147 at this time.

## **CONCLUSION**

Based on a “worst-case” analysis, the potential adverse operational air quality impacts from the adoption and implementation of PAR 1147 are considered significant and unavoidable. No feasible mitigation measures have been identified that would reduce the operational air quality impacts associated with implementing the PAR 1147 from the entire project to less than significant levels. Further, no project alternatives have been identified that would reduce these impacts to insignificance.

## ATTACHMENT F

(Adopted December 5, 2008) (Amended September 9, 2011)(Date of adoption)

### **RULE 1147                      NO<sub>x</sub> REDUCTIONS FROM MISCELLANEOUS SOURCES**

(a) Purpose and Applicability

The purpose of this rule is to reduce nitrogen oxide emissions from gaseous and liquid fuel fired combustion equipment as defined in this rule. This rule applies to manufacturers, distributors, retailers, installers, owners, and operators of ovens, dryers, dehydrators, heaters, kilns, calciners, furnaces, crematories, incinerators, heated pots, cookers, roasters, fryers, closed and open heated tanks and evaporators, distillation units, afterburners, degassing units, vapor incinerators, catalytic or thermal oxidizers, soil and water remediation units and other combustion equipment with nitrogen oxide emissions that require a District permit and are not specifically required to comply with a nitrogen oxide emission limit by other District Regulation XI rules. This rule does not apply to solid fuel-fired combustion equipment, internal combustion engines ~~subject to District Rule 1110.2~~, turbines, food ovens, charbroilers, ~~or~~ boilers, water heaters, thermal fluid heaters, ~~and enclosed process heaters subject to District Rules 1109, 1146, 1146.1, or 1146.2~~ and other combustion equipment subject to nitrogen oxide limits of other District Regulation XI rules 1111, 1112, 1117, 1118, 1121, or 1135.

(b) Definitions

- (1) ANNUAL CAPACITY FACTOR means the ratio of the ANNUAL HEAT INPUT of a unit in a calendar year to the amount of fuel it could have burned if it had operated at the rated heat input capacity for 100 percent of the time during the calendar year.
- (2) ANNUAL HEAT INPUT means the actual amount of heat released by fuels burned in a unit during a calendar year, based on the fuel's higher heating value.
- (3) BTU means British thermal unit or units.
- (4) COMBUSTION SYSTEM MODIFICATION means ~~replacement of a~~ any modification of burner(s) or heating unit that contains a burner(s), or burner(s) fuel system, combustion air supply, or combustion control system that changes the RATED HEAT INPUT CAPACITY of the burner(s) or heating unit.
- (5) COMBUSTION SYSTEM REPAIR means fixing or refurbishing of a burner(s) or heating unit that contains a burner(s), or burner(s) fuel system,

combustion air supply, or combustion control system that does not result in a COMBUSTION SYSTEM MODIFICATION or COMBUSTION SYSTEM REPLACEMENT.

- (6) COMBUSTION SYSTEM REPLACEMENT means the substituting of a burner(s) or a heating unit that includes a burner(s).
- (75) FOOD OVEN means an oven, cooker, dryer, roaster, or other fuel-fired unit, excluding fryer, used to heat, ~~or~~ cook, dry, roast, or prepare food, food products, or products used for making beverages for human consumption.
- (86) HEATER means any combustion equipment that is fired with gaseous and/or liquid fuels and which transfers heat from combusted fuel to materials or air contained in the unit or in an adjoining cabinet, container or structure. Heater does not include any boiler or PROCESS HEATER designed to transfer heat to water or process streams that is subject to any NOx emission limits of District Rules 1109, 1146, 1146.1 or 1146.2, and does not include any internal combustion engine or turbine.
- (97) HEAT INPUT means the higher heating value of the fuel to the unit measured as BTU per hour.
- (108) HEAT OUTPUT means the enthalpy of the working fluid output of the unit.
- (11) INFRARED BURNER means a burner with:
- (A) Ceramic, metal fiber, sintered metal, or perforated metal flame-holding surface;
  - (B) More than 50% of the heat output as infrared radiation and that is operated in a manner where the zone including and above the flame-holding surface is red and does not produce observable blue or yellow flames in excess of ½ inch (13 mm) in length; and
  - (C) A RATED HEAT INPUT CAPACITY per square foot of flame holding surface of 100,000 BTU per hour or less.
- (129) IN-USE UNIT means ~~any UNIT that~~ is demonstrated to the Executive Officer that a UNIT was in operation at the current location prior to January 1, 2010.
- (139) MAKE-UP AIR HEATER means a UNIT used to heat incoming air in order to maintain the temperature of a spray booth, container, room or other enclosed space and to provide breathable air for a person who may

~~be present during operation where a person is working including spray booths that are also used for drying coatings and auto body spray booths with an adjacent contiguous section for drying automobile coatings. A MAKE UP AIR HEATER is not a burner used to heat an oven, dryer, heater or other unit where workers are not present during heating.~~

- (144) NO<sub>x</sub> EMISSIONS means the sum of nitrogen oxide and nitrogen dioxide in the flue gas, collectively expressed as nitrogen dioxide.
- (152) PROCESS HEATER means any equipment that is fired with gaseous and/or liquid fuels and which transfers heat from combusted fuel to water or process streams. PROCESS HEATER does not include any fryer or any furnace, kiln or oven used for melting, heat treating, annealing, drying, curing, baking, cooking, calcining, or vitrifying; any heated tank; or any unfired waste heat recovery heater that is used to recover sensible heat from the exhaust of any combustion equipment.
- (163) PROTOCOL means a South Coast Air Quality Management District approved test protocol for determining compliance with emission limits for applicable equipment.
- (174) RATED HEAT INPUT CAPACITY means the gross HEAT INPUT of the combustion UNIT specified on a permanent rating plate attached by the manufacturer to the device. If the UNIT has been altered or modified ~~such that its gross HEAT INPUT is higher or lower than the rated HEAT INPUT capacity specified on the original manufacturer's permanent rating plate,~~ the new gross HEAT INPUT as specified in subparagraph (c)(12)(B) shall be considered as the rated HEAT INPUT capacity.
- (18) RELOCATION means removal from one parcel of land in the District and installation on another non-contiguous parcel of land. RELOCATION does not mean a move from one parcel of land to another parcel of land where the two parcels have the same address, are under common ownership, and are separated solely by a public roadway or other public right-of-way.
- (195) REMEDIATION UNIT means a device used to capture or incinerate air toxics, VOCs or other combustible vapors extracted from soil or water.
- (2046) RESPONSIBLE OFFICIAL means:
- (A) For a corporation: a president or vice-president of the corporation in charge of a principal business function or a duly authorized

person who performs similar policy-making functions for the corporation; or

(B) For a partnership or sole proprietorship: general partner or proprietor, respectively.

(C) For a government agency: a duly authorized person

(217) TENTER FRAME DRYER is a cloth dryer that holds the edges of the material as it is dried in order to control shrinkage.

(2248) THERM means 100,000 BTU.

(2349) UNIT means any oven, dryer, dehydrator, heater, kiln, calciner, furnace, crematory, incinerator, heated pot, cooker, roaster, fryer, heated tank and evaporator, distillation unit, afterburner, degassing unit, vapor incinerator, catalytic or thermal oxidizer, soil or water remediation units and other combustion equipment with nitrogen oxide emissions requiring a District permit and not specifically required to comply with a NOx emission limit by other District Regulation XI rules. UNIT does not mean any solid fuel fired combustion equipment, internal combustion engine-subject to District Rule 1110.2, turbine, charbroiler, ~~or~~-boiler, water heater, thermal fluid heaters, ~~or~~-enclosed process heater, ~~subject to District Rules 1109, 1146, 1146.1, or 1146.2 or~~and other combustion equipment subject to nitrogen oxide limits of other District Regulation XI rules 1111, 1112, 1117, 1118, 1121, or 1135.

(240) VAPOR INCINERATOR means a furnace, afterburner, or other device for burning and destroying air toxics, VOCs or other combustible vapors in gas or aerosol form in gas streams.

(c) Requirements

(1) On or after January 1, 2010 any person owning or operating a unit subject to this rule shall not operate the unit in a manner that exceeds the applicable nitrogen oxide emission limit specified in Table 1:

(A) at the time a District permit is required

(i) for operation of a new, relocated or ~~modified-replacement~~ unit, or

(ii) for a combustion system modification or combustion system replacement, or

(iii) July 1 of ~~the~~ the year a unit becomes 30 years old; or,



(B) for in-use units, in accordance with the compliance schedule in Table 2, or at the time of a combustion modification.

**Table 1 – NO<sub>x</sub> Emission Limit  
for Unit Heat Ratings ≥ 325,000 BTU/hour**

Equipment Category(ies)	NO <sub>x</sub> Emission Limit PPM @ 3% O <sub>2</sub> , dry or Pound/mmBtu heat input		
	Process Temperature		
Gaseous Fuel-Fired Equipment	≤ 800° F	> 800 ° F and < 1200° F	≥ 1200 ° F
Asphalt Manufacturing Operation	40 ppm	40 ppm	
Afterburner, Degassing Unit, Remediation Unit, Thermal Oxidizer, Catalytic Oxidizer or Vapor Incinerator <sup>1</sup>	<del>360</del> ppm or 0.0736 lb/mmBtu	60 ppm or 0.073 lb/mmBtu	60 ppm or 0.073 lb/mmBtu
<u>Burn-off Furnace, Burnout Oven, Incinerator or Crematory with or without Integrated Afterburner</u>	<u>60 ppm or 0.073 lb/mmBtu</u>	<u>60 ppm or 0.073 lb/mmBtu</u>	<u>60 ppm or 0.073 lb/mmBtu</u>
Evaporator, Fryer, Heated Process Tank, or Parts Washer	60 ppm or 0.073 lb/mmBtu	60 ppm or 0.073 lb/mmBtu	
Metal Heat Treating, Metal Melting Furnace, Metal Pot, or Tar Pot	60 ppm or 0.073 lb/mmBtu	60 ppm or 0.073 lb/mmBtu	60 ppm or 0.073 lb/mmBtu
Oven, Dehydrator, Dryer, Heater, Kiln, <del>Crematory, Incinerator</del> , Calciner, Cooker, Roaster, Furnace, or Heated Storage Tank	30 ppm or 0.036 lb/mmBtu	30 ppm or 0.036 lb/mmBtu	60 ppm or 0.073 lb/mmBtu
Make-Up Air Heater or other Air Heater located outside of building with temperature controlled zone inside building	30 ppm or 0.036 lb/mmBtu	<u>30 ppm or 0.036 lb/mmBtu</u>	
Tenter Frame or Fabric or Carpet Dryer	30 ppm or 0.036 lb/mmBtu		
Other Unit or Process Temperature	30 ppm or 0.036 lb/mmBtu	30 ppm or 0.036 lb/mmBtu	60 ppm or 0.073 lb/mmBtu
Liquid Fuel-Fired Equipment	≤ 800° F	> 800 ° F and < 1200° F	≥ 1200 ° F
All liquid fuel-fired Units	40 ppm or 0.053 lb/mmBtu	40 ppm or 0.053 lb/mmBtu	60 ppm or 0.080 lb/mmBtu

1. Emission limit applies to burners in units fueled by 100% natural gas that are used to incinerate air toxics, VOCs, or other vapors; or to heat a unit. The emission limit applies solely when burning 100% fuel and not when the burner is incinerating air toxics, VOCs, or other vapors. The unit shall be tested or certified to meet the emission limit while fueled with natural gas.

**Table 2 – Compliance Schedule for Specific In-Use Units and In-Use Units with NOx Emissions of One Pound per Day or More**

<b>Equipment Category(ies)</b>	<b>Submit Permit Application</b>	<b>Unit Shall Be in Compliance</b>
<b><u>Specific UNIT</u></b>		
Remediation UNIT manufactured <u>and installed prior to March 1, 2012</u> <del>1998</del>	Seven months prior to <u>a combustion system</u> modification, <u>combustion system</u> <u>replacement or unit</u> <u>replacement or a</u> <u>change of</u> <del>location</del> <u>relocation.</u>	Upon combustion <u>system modification,</u> <u>combustion system</u> <u>replacement or unit</u> <u>replacement or</u> <u>change of</u> <del>location</del> <u>relocation</u> beginning March 1, 2012
<u>Evaporator, heated process tank, or parts</u> <u>washer with a District permit issued and</u> <u>operating prior to January 1, 2014</u>	Seven months prior to <u>combustion system</u> <u>modification,</u> <u>combustion system</u> <u>replacement or unit</u> <u>replacement</u>	Upon combustion <u>system modification,</u> <u>combustion system</u> <u>replacement or unit</u> <u>replacement</u>
Tar Pot		All new permit applications beginning January 1, 2013
<b><u>UNIT with Emissions ≥1 Pound/Day</u></b>		
Afterburner, degassing unit, catalytic oxidizer, thermal oxidizer, vapor incinerator, <del>evaporator, food oven, fryer, heated process</del> <del>tank, parts washer</del> or spray booth make-up air heater manufactured prior to 1998	December 1, 2013	July 1, 2014
Other UNIT manufactured prior to 1986	December 1, 2011	July 1, 2012
Other UNIT manufactured prior to 1992	December 1, 2011	July 1, 2012
Other UNIT manufactured prior to 1998	December 1, 2012	July 1, 2013
Any UNIT manufactured after 1997	December 1 of the year prior to the compliance date	July 1 of the year the unit is 15 years old

(2) Unit age shall be based on:

(A) The original date of manufacture as determined by:

- (i) Original manufacturer's identification or rating plate permanently fixed to the equipment. If not available, then;
- (ii) Invoice from manufacturer for purchase of equipment. If not available, then;

- (iii) Information submitted to the AQMDistrict with prior permit applications for the specific unit. If not available, then;
  - (iv) ~~The Unit is~~ will be deemed by the AQMDistrict to be 20 years old as of July 1, 2012; or
- (B) The date that operations start for a tunnel kiln or crematory rebuilt prior to January 1, 2010 with new burner(s) as determined by:
  - (i) Production or fuel usage records after burner installation, and
  - (ii) Invoice for burner(s) installation. If not available, then;
  - (iii) Invoice for burner(s) purchase, If not available, then;
  - (iv) Manufacture date of burner(s) as identified by an attached manufacturers identification or rating plate or date stamp.
- (3) In accordance with the schedule in the permit, owners or operators of units shall determine compliance with the emission limit specified in Table 1 using a District approved test protocol. The test protocol shall be submitted to the District at least 90 days prior to the scheduled test and approved by the District Source Testing Division.
- (4) Notwithstanding the requirements of paragraph (c)(1), units with combustion system modifications or combustion system replacements completed prior to December 5, 2008 and after January 1, 2000 that resulted in replacement of more than 75% of the rated heat input capacity shall comply with the applicable emission limit specified in Table 1 of paragraph (c)(1) ten years from the date the modification was performed.
- (5) The date a combustion system modification or combustion system replacement, as specified in paragraphs (c)(1) and (c)(4), is performed; shall be determined according to ~~subparagraph (c)(2)(B), if not available, then subparagraph (c)(2)(C).~~
- (6) ~~Notwithstanding the requirements of paragraph (c)(1), a unit with a District permit to construct or permit to operate, and with emissions of one pound per day or less of nitrogen oxides, may defer compliance with the applicable emission limit specified in Table 1 of paragraph (c)(1) for up to five years from the applicable compliance date in Table 2 of (c)(1). NOx emissions of less than one pound per day or less shall be demonstrated by~~ compliance with one of the following requirements:

- (A) ~~A unit has a rated heat input capacity of less than 400325,000 Btu per hour; or less.~~
- (B) A permit condition that limits NOx emissions to less than 1 pound per day; ~~The unit as of September 9, 2011 has a NOx permit emission limit of one pound per day or less, a permit condition with a process limit that results in one pound per day or less of NOx emissions including but not limited to fuel use, material throughput or operating schedule, or actual operations that results in one pound per day or less of NOx emissions. Daily operating records of unit fuel use or process rate and daily operating hours demonstrating that starting January 1, 2012 until the date of compliance, the unit has a maximum emission rate of 1 pound of NOx per day.~~
- (C) Monthly recordkeeping of unit use documenting average emissions of less than one pound per day calculated based on a unit-specific non-resettable time meter or a non-resettable unit fuel meter with fuel use corrected to standard temperature and pressure. Owners or operators of units with installed calibrated non-resettable totalizing time or fuel meters may elect to comply with the requirements of (c)(6) by ~~requesting, no later than January 1, 2012, unit permit conditions of limits on operating hours per calendar month and/or a fuel meter and a limit on the amount of fuel use per~~ demonstrating each calendar month so that monthly NOx emissions are less than 2230 pounds or less. Monthly emissions with a time meter shall be calculated using the unit's maximum hourly emission rate in pounds multiplied by the hours of operation each calendar month. The maximum hourly emission rate shall be equal to the rated heat input capacity of the unit multiplied by the unit's emissions at the rated heat input capacity in pound per million Btu. Monthly emissions calculated with a fuel meter shall be equal to the unit's emission rate per unit of fuel multiplied by the amount of fuel, corrected to standard temperature and pressure, used that calendar month.
- (D) Daily recordkeeping of unit operation and the following specified rated heat input capacities operating less than or equal to the specified number of hours per day in Table 3:

**Table 3 – Small and Low Use Unit Daily Operating Limits**

<u>Unit Rating (Btu/hour)</u>	<u>Daily Hour Limit</u>
<u>325,000 to 400,000</u>	<u>16</u>
<u>400,001 to 500,000</u>	<u>14</u>
<u>500,001 to 800,000</u>	<u>8</u>
<u>800,001 to 1,000,000</u>	<u>6</u>
<u>1,000,001 to 1,200,000</u>	<u>5</u>

- (E) Daily recordkeeping of unit operation and the following specified rated heat input capacities operating less than or equal to the specified number of hours per calendar month in Table 4:

**Table 4 – Small and Low Use Unit Monthly Operating Limits**

<u>Unit Rating (Btu/hour)</u>	<u>Monthly Hour Limit</u>
<u>325,000 to 400,000</u>	<u>352</u>
<u>400,001 to 500,000</u>	<u>308</u>
<u>500,001 to 800,000</u>	<u>176</u>
<u>800,001 to 1,000,000</u>	<u>132</u>
<u>1,000,001 to 1,200,000</u>	<u>110</u>

- (F) Unit natural gas use less than or equal to 7,692 cubic feet per day at standard temperature and pressure, documented by daily recordkeeping of gas consumption with a non-resettable fuel meter;  
or  
 (G) Daily recordkeeping of unit operation using process specific parameters that demonstrate the unit does not emit one pound per day or more of NOx emissions, does not exceed the daily and weekly hours of operation submitted for the District permit application, and complies with all unit permit conditions.

Owners or operators of units complying under this paragraph that fail to continuously demonstrate compliance with the applicable heat input rating, permit condition, or daily or monthly requirements of this

paragraph shall comply with the applicable emission limit in Table 1 by the applicable compliance date in Table 2 or within 210 days from the date the unit first fails to continuously comply with heat input rating, permit condition, or the daily or monthly ~~emission-limit~~ requirement whichever is later. A unit that must demonstrate compliance with an emission limit for failure to demonstrate emissions less than one pound per day pursuant to this provision shall comply with the applicable emission limit for the life of the unit.

- (7) On or after January 1, 2010, any person owning or operating a unit subject to this rule shall perform combustion system maintenance in accordance with the manufacturer's schedule and specifications as identified in the manual and other written materials supplied by the manufacturer or distributor. The owner or operator shall maintain on site at the facility where the unit is being operated a copy of the manufacturer's, distributor's, installer's or maintenance company's written maintenance schedule and instructions and retain a record of the maintenance activity for a period of not less than three years. The owner or operator shall maintain on site at the facility where the unit is being operated a copy of the District certification or District approved source test reports, conducted by an independent third party, demonstrating the specific unit complies with the emission limit. The source test report(s) must identify that the source test was conducted pursuant to a District approved protocol. The model and serial numbers of the specified unit shall clearly be indicated on the source test report(s). The owner or operator shall maintain on the unit in an accessible location a permanent rating plate. The maintenance instructions, maintenance records and the source test report(s) or District certification shall be made available to the Executive Officer upon request.
- (8) Any person owning or operating a unit subject to this rule complying with Table 1 using pounds per million BTU, shall install and maintain in service non-resettable, totalizing, fuel meters for each unit's fuel(s) prior to the compliance determination specified in paragraph (c)(3). Owners or operators of a unit with a combustion system that operates at only one firing rate that comply with an emission limit using pounds per million BTU shall install a non-resettable, totalizing, time or fuel meter for each fuel.

- (9) Meters that require electric power to operate shall be provided a permanent supply of electric power that cannot be unplugged, switched off, or reset except by the main power supply circuit for the building and associated equipment or the unit's safety shut-off switch. Any person operating a unit subject to this rule shall not shut off electric power to a unit meter unless the unit is not operating and is shut down for maintenance or safety.
- (10) On or before the compliance date, the owner or operator of a unit shall demonstrate compliance with the applicable emission limit in Table 1 pursuant to the provisions of subdivisions (d) or (e).
- (11) **Compliance by Certification**  
For units that do not allow adjustment of the fuel and combustion air for the combustion system by the owner or operator, and upon approval by the Executive Officer, an owner or operator may demonstrate compliance with the emission limit and demonstration requirement of this subdivision by certification granted to the manufacturer for any model of equipment sold for use in the District. Any unit certified pursuant to subdivision (e) shall be deemed in compliance with the emission limit in Table 1 and demonstration requirement of this subdivision, unless a District source test shows non-compliance.
- (12) **Identification of Units**
  - (A) **New Manufactured Units**  
The manufacturer shall display the model number and the rated heat input capacity of the unit complying with subdivision (c) on a permanent rating plate. The manufacturer shall also display the District certification status on the unit when applicable.
  - (B) **Modified Units**  
The owner or operator of a unit with a modified combustion system (new or modified burners) shall display the new rated heat input capacity on a new permanent supplemental rating plate installed in an accessible location on the unit or burner. The gross heat input shall be based on the maximum fuel input corrected for fuel heat content, temperature and pressure. Gross heat input shall be demonstrated by a calculation based on fuel consumption recorded by an in-line fuel meter by the manufacturer or installer.
- (13) The owner or operator shall maintain on site a copy of all documents identifying the unit's rated heat input capacity for as long as the unit is

retained on-site. The rated heat input capacity shall be identified by a manufacturer's or distributor's manual or invoice and a permanent rating plate attached to the unit. If a unit is modified, the rated heat input capacity shall be calculated pursuant to subparagraph (c)(12)(B). The documentation of rated heat input capacity for modified units shall include the name of the company and person modifying the unit, a description of all modifications, the dates the unit was modified and calculation of rated heat input capacity. The documentation for modified units shall be signed by the highest ranking person modifying the unit.

(14) Alternate Compliance Plans

(A) Owners or operators of facilities with ~~three~~five or more in-use units ~~with permit emissions greater than one pound per day NOx that will required to demonstrate compliance with the emission limit within two consecutive calendar years~~burner modifications may submit an alternate compliance plan ~~by January 1, 2012~~to phase-in compliance of all units ~~starting April 1, 2012 and ending before January 1, 2015~~. The compliance plan shall be submitted at least 270 days prior to the date the first unit is required to demonstrate compliance. The alternate compliance plan shall identify the units included in the plan and a schedule identifying when each unit will comply with the emission limit and the compliance determination for each unit will be completed. At least one unit shall ~~be demonstrate compliance modified to comply~~with the applicable emission limit of this rule by the first compliance date for any unit included in the plan~~April 1, 2012~~. Each year thereafter, a minimum of 20 percent of additional units and no less than one unit shall ~~demonstrate compliance~~~~be modified to comply~~with the applicable emission limit. All units with NOx emissions greater than or equal to 1 pound per day identified in Table 2 of paragraph (c)(1) must demonstrate compliance~~y~~ with the applicable emission limit of this rule before January 1, 2015.

(15) Any unit with NOx emissions less than one pound per day that becomes 30 years old on or before July 1, 2018 shall demonstrate compliance with the applicable emission limit specified in paragraph (c)(1) on or before July 1, 2020.



~~(B) Owners or operators of facilities with pollution control unit(s) in series with process unit(s) (e.g., an oven and afterburner) that have NOx emissions greater than one pound per day and different compliance dates may elect to synchronize compliance of all units in the series on one date no later than December 1, 2013.~~

(d) Compliance Determination

(1) All compliance determinations pursuant to paragraph (c)(6) shall be calculated:

(A) Using a District approved test protocol averaged over a period of at least 15 minutes of combustion system operation and no more than 60 consecutive minutes;

(B) After unit start up; and

(C) In the unit's as-found operating condition.

(2) For each unit, a compliance determination shall be made in the maximum heat input range at which the unit normally operates.

(3) An additional compliance determination shall be made using a heat input of less than 35% of the rated heat input capacity for any of the following types of units with process temperature less than 1200 °F that operate with variable heat input that falls below 50% rated heat input capacity during normal operation: Make-Up Air Heater, other Air Heater located outside of process building, Oven, Dehydrator, Dryer, Tenter-Frame Dryer, Fabric Dryer, Carpet Dryer, Heater, Cooker, Roaster, non-metallurgical Furnace, or Heated Storage Tank. The additional compliance determination for the specified units in this paragraph shall be made:

(A) Using a heat input of less than 35% of the rated heat input capacity;  
or

(B) For at least 30 consecutive minutes after unit start up using the lowest operating temperature that may be used during normal operation of the unit.

(4) For compliance determinations after the initial approved test, the operator is not required to resubmit a protocol for approval if: there is a previously approved protocol and the unit has not been altered in a manner that requires a permit alteration; and rule or permit emission limits have not become more stringent~~changed~~ since the previous test.

- (52) All parts per million emission limits specified in subdivision (c) are referenced at 3 percent volume stack gas oxygen on a dry basis.
- (63) Compliance with the NO<sub>x</sub> emission limits of subdivision (c) and determination of stack-gas oxygen and carbon dioxide concentrations for this rule shall be determined according to the following procedures:
- (A) District Source Test Method 100.1 – Instrumental Analyzer Procedures for Continuous Gaseous Emission Sampling (March 1989); or
  - (B) ASTM Method D6522-00 – Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers; or
  - (C) United States Environmental Protection Agency Conditional Test Method CTM-030 – Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Emissions from Natural Gas-Fired Engines, Boilers and Process Heaters Using Portable Analyzers; or
  - (D) District Source Test Method 7.1 – Determination of Nitrogen Oxide Emissions from Stationary Sources (March 1989); and
  - (E) District Source Test Method 10.1 – Carbon Monoxide and Carbon Dioxide by Gas Chromatograph/Non-Dispersive Infrared Detector (GC/NDIR) – Oxygen by Gas Chromatograph-Thermal Conductivity (GC/TCD) (March 1989); or
  - (F) Any alternative test method determined approved before the test in writing by the Executive Officers of the District, the California Air Resources Board and the United States Environmental Protection Agency.
- (74) For any operator who chooses to comply using pound per million Btu, NO<sub>x</sub> emissions in pounds per million Btu of heat input shall be calculated using procedures in 40 CFR Part 60, Appendix A, Method 19, Sections 2 and 3.
- (85) Records of source tests shall be maintained for ten years and made available to District personnel upon request. Emissions determined to exceed any limits established by this rule through the use of any of the test

methods specified in subparagraphs (d)(3)(A) through (d)(3)(F) shall constitute a violation of this rule.

- (96) All compliance determinations shall be made using an independent contractor to conduct testing, which is approved by the Executive Officer under the Laboratory Approval Program for the applicable test methods.
- (107) For equipment with two or more units in series or multiple units with a common exhaust ~~or units with one dual purpose burner that both heats the process and incinerates VOC, toxics or PM~~, the owner or operator may demonstrate compliance with the emission limits in Table 1 by one of the following:
- (A) Test each unit separately and demonstrate each unit's compliance with the applicable limit, or
  - (B) Test only after the last unit in the series and at the end of a common exhaust for multiple units ~~or dual purpose burner~~, when all units are operating, and demonstrate that the series of units either meet:
    - (i) The lowest emission limit in Table 1 applicable to any of the units in series, or
    - (ii) A heat input weighted average of all the applicable emission limits in Table 1 using the following calculation.

$$\text{Weighted Limit} = \frac{\sum [ (EL_X) * (Q_X) ]}{\sum [ Q_X ]}$$

**Where:**

$EL_X$  = emission limit for unit X

$Q_X$  = total heat input for unit X during test

- (11) An owner or operator of any unit with a unit heat rating of 2 million Btu per hour or less may elect to demonstrate compliance with the applicable emission limit through a burner manufacturer's performance warranty in lieu of a compliance demonstration pursuant to paragraphs (d)(1) through (d)(10) or subdivision (e) of this rule provided the following information

required in subparagraphs (d)(11)(A) through (d)(11)(C) is provided when a permit application is submitted for a unit:

- (A) The manufacturer or manufacturer authorized distributor of the burner(s) submits performance warranties that are signed by the burner manufacturer's responsible official pursuant to subparagraph (b)(20)(A) of this rule, that warrants the burner(s), fuel and combustion air system, and combustion control system identified in the application for the District Permit that complies with the applicable NOx emission limit in Table 1 of paragraph (c)(1) when used for specified processes, operating conditions, and within specified temperature ranges. The signed performance warranties shall be submitted separately, and addressed to the:

  - (i) owner or operator of the unit; and
  - (ii) Executive Officer or designee.
- (B) The burner manufacturer, manufacturer authorized distributor submits to the Executive Officer or designee, supporting documentation including emission test reports of at least five District approved emission tests using District approved test protocol and methods of five different units using the same burner, fuel and combustion air system, and combustion control system that demonstrate compliance with the applicable emission limit for the same type of process operating in the same temperature range as the unit in the permit application. The five emission test results submitted for the manufacturer's performance warranty must have been approved by the District prior to submittal of an application for permit.
- (C) A contract or purchase order, signed by the responsible official of the unit's owner or operator pursuant to paragraph (b)(20), for purchase of the burner(s), fuel and combustion air system, and combustion control system to be installed in the unit as identified in the permit application and the signed letter or bid from the burner manufacturer to the owner or operator of the unit as specified in subparagraph (d)(11)(A) of this rule.
- (D) The owner or operator of any unit where the requirements specified in subparagraphs (d)(11)(A) through (d)(11)(C) are not met or

submits any manufacturer's performance warranty, contract, or purchase order that is not identical to the combustion system specified in the application for the unit's permit and installed in the unit, shall demonstrate unit compliance with the applicable emission limit in Table 1 through emission testing pursuant to the requirements of paragraphs (d)(1) through (d)(10) of this rule.

(i) The owner or operator specified above shall demonstrate unit compliance through emission testing within 210 calendar days from the date a permit is approved by the District. A unit that must demonstrate compliance with an emission limit of this paragraph and shall comply with the applicable emission limit for the life of the unit.

(E) The owner or operator of any unit that fails to operate the unit as specified in the manufacturer's performance warranty in subparagraphs (d)(11)(A) through (d)(11)(C), including specified processes, operating conditions, and temperatures, shall demonstrate compliance with the applicable emission limit in Table 1 through emission testing pursuant to the requirements of paragraphs (d)(1) through (d)(10) of this rule.

(e) Certification

(1) Unit Certification

For units that do not allow adjustment of the fuel and combustion air for the combustion system by the owner or operator, any manufacturer or distributor that distributes for sale or sells units or burner systems for use in the District may elect to apply to the Executive Officer to certify such units or burner systems as compliant with subdivision (c).

(2) Manufacturer Confirmation of Emissions

Any manufacturer's application to the Executive Officer to certify a model of equipment as compliant with the emission limit and demonstration requirement of subdivision (c) shall obtain confirmation from an independent contractor that is approved by the Executive Officer under the Laboratory Approval Program for the necessary test methods prior to applying for certification that each unit model complies with the applicable requirements of subdivision (c). This confirmation shall be

based upon District approved emission tests of standard model units and a District approved protocol shall be adhered to during the confirmation testing of all units subject to this rule. Emission testing shall comply with the requirements of paragraphs (d)(1) through (d)(5) except emission determinations shall be made at 100% rated heat input capacity and an additional emission determination shall be made using a heat input of less than 35% of the rated heat input capacity for any Afterburner, Degassing Unit, Remediation Unit, Thermal Oxidizer, Catalytic Oxidizer, Vapor Incinerator, Make-Up Air Heater, other Air Heater located outside of process building, Oven, Dehydrator, Dryer, Tenter-Frame Dryer, Fabric Dryer, Carpet Dryer, Heater, Kiln, Crematory, Incinerator, Calciner, Cooker, Roaster, non-metallurgical Furnace, or Heated Storage Tank.

- (3) When applying for unit(s) certification, the manufacturer shall submit to the Executive Officer the following:
  - (A) A statement that the model is in compliance with subdivision (c). The statement shall be signed and dated by the manufacturer's responsible official and shall attest to the accuracy of all statements;
  - (B) General Information
    - (i) Name and address of manufacturer,
    - (ii) Brand name, if applicable,
    - (iii) Model number, as it appears on the unit rating plate; and
    - (iv) Rated Heat Input Capacity, gross output of burner(s) and number of burners;
  - (C) A description of each model being certified; and
  - (D) A source test report verifying compliance with the applicable emission limit in subdivision (c) for each model to be certified. The source test report shall be prepared by the confirming independent contractor and shall contain all of the elements identified in the District approved Protocol for each unit tested. The source test shall have been conducted no more than ninety (90) days prior to the date of submittal to the Executive Officer.
- (4) When applying for unit certification, the manufacturer shall submit the information identified in paragraph (e)(3) no more than ninety (90) days after the date of the source test identified in subparagraph (e)(3)(D) and at

least 120 days prior to the date of the proposed sale and installation of any District certified unit.

- (5) The Executive Officer shall certify a unit model which complies with the provisions of subdivision (c) and of paragraphs (e)(2), (e)(3), and (e)(4).
- (6) Certification status shall be valid for five years from the date of approval by the Executive Officer. After the fifth year, recertification shall be required by the Executive Officer according to the requirements of paragraphs (e)(2), (e)(3), and (e)(4).

(f) Enforcement

- (1) The Executive Officer may inspect certification records and unit installation, operation, maintenance, repair, combustion system modification, combustion system repair, combustion system replacement, unit replacement, relocation and test records of owners, operators, manufacturers, distributors, retailers, and installers of units located in the District, and conduct such tests as are deemed necessary to ensure compliance with this rule. Tests shall include emission determinations, as specified in paragraph (d)(1) to (d)(104), of a random sample of any category of units subject to this rule.
- (2) An emission determination specified under paragraph (f)(1) that finds NOx emissions in excess of those allowed by this rule or permit conditions shall constitute a violation of this rule.

(g) Exemptions

- (1) The provisions of this rule shall not apply to units:
  - (A) subject to the nitrogen oxide limits of other District Regulation XI rules ~~1109, 1110.2, 1111, 1112, 1117, 1121, 1134, 1135, 1146, 1146.1, or 1146.2~~; or
  - (B) located at RECLAIM facilities.
- (2) The provisions of this rule shall not apply to charbroilers or food ovens.
- (3) The provisions of this rule shall not apply to:
  - (A) Flares subject to District Rule 1118;
  - (B) Flares, afterburners, degassing units, thermal or catalytic oxidizers or vapor incinerators in which a fuel, including but not limited to natural gas, propane, butane or liquefied petroleum gas, is used

- only to maintain a pilot for vapor ignition or is used for five minutes or less to bring a unit up to operating temperature;
- (C) Municipal solid waste incinerators with a District permit operating before December 5, 2008;
- (D) An afterburner or vapor incinerator with a District permit operating before December 5, 2008 that has an integrated thermal fluid heat exchanger that captures heat from the afterburner or vapor incinerator and an oven or furnace exhaust in order to reduce fuel consumption by an oven or the afterburner or vapor incinerator; or
- (E) A flare, afterburner, degassing unit, remediation unit, thermal oxidizer, catalytic oxidizer or vapor incinerator process in which a ~~fuel, including but not limited to natural gas, propane, butane or liquefied petroleum gas, is mixed with~~ particulate matter, air toxics, VOCs, landfill gas, digester gas or other combustible vapors are mixed in the unit's burner with combustion air or fuel, including but not limited to natural gas, propane, butane or liquefied petroleum gas, prior to or at incineration in the unit, in order to maintain vapor concentration above the upper explosion limit or above a manufacturer specified limit in order to maintain combustion or temperature in the unit. This exemption does not apply to a regenerative thermal or catalytic oxidizer unit with a burner with a separate fuel line used to heat up or maintain temperature of the unit or a unit that incinerates particulate matter, air toxics, VOCs or other combustible vapors in a gas stream moving past the burner flame.
- (4) Afterburners, degassing units, thermal oxidizers, catalytic oxidizers, vapor incinerators, and spray booth make-up air heaters installed and operating before March 1, 2012 and with emissions less than one pound per day, are exempt from the emission limit in Table 1 until the unit is 30 years old or undergoes a combustion system modification, combustion system replacement, or relocation or the unit is replaced. ~~New a~~Afterburners, degassing units, thermal oxidizers, catalytic oxidizers, vapor incinerators, and spray booth make-up air heaters installed for use at a specific facility after December 5, 2008 and before March 1, 2012 and with emissions of one pound per day or more, ~~are exempt from~~shall comply with the



emission limit in Table 1 ~~until~~ on and after July 1 of the year the unit is 15 years old.

- (5) ~~New or relocated~~ Remediation units installed after December 5, 2008 and before March 1, 2012, are exempt from the emission limit in Table 1 until replacement with a new unit, a combustion system modification, combustion system replacement, or change of location relocation on or after January 1, 2012.
- (6) Fryers installed and operating before January 1, 2014 and with emissions less than one pound per day, are exempt from the emission limit in Table 1 until the unit is 30 years old, a combustion system modification, combustion system replacement, relocation, or the unit is replaced. ~~New food ovens, fryers, heated process tanks, parts washers, and evaporators~~ installed after December 5, 2008 and operating before January 1, 2014 and with emissions of one pound per day or more, are exempt from the emission limit in Table 1 until July 1 of the year the unit is 15 years old.
- (7) Remediation units are exempt from the applicable emission limit in Table 1 while fueled with propane, butane or liquefied petroleum gas in a location where natural gas is not available. Remediation units must comply with the emission limit when natural gas is available and while fueled with natural gas.
- (8) The provisions of paragraphs (c)(1) and (c)(3) of this rule shall not apply to any evaporator, heated process tank, or parts washer with a District permit issued and operating prior to January 1, 2014 until a combustion system modification, combustion system replacement, relocation, or the unit is replaced.
- (9) The provisions of paragraph (c)(3) of this rule shall not apply to units heated solely with infrared burners.
- (10) On and after (date of adoption) the provisions of paragraphs (c)(1) and (c)(3) of this rule shall not apply to any unit that becomes subject to this rule subsequent to a revision of District Rule 219, on or after May 5, 2017, until the unit is replaced. a combustion system modification, combustion system replacement, unit relocation, the applicable compliance date in Table 2 of paragraph (c)(1), or, for units with NOx emissions less than one pound per day, the unit becomes 30 years old.
- (11) The requirement to demonstrate compliance with an emission limit in Table 1 shall not apply to any in-use unit with emissions less than one

pound per day NOx at the time the unit is relocated with the facility to the new facility location and the facility and unit is owned and operated by the same company and owner(s) for 36 calendar months prior to and 36 calendar months after the unit relocation. This exemption from demonstrating compliance with an emission limit at the time of a unit and facility relocation does not apply if the relocated unit is replaced, undergoes a combustion system modification or combustion system replacement, subject to a compliance date in Table 2 of paragraph (c)(1), or, for units with NOx emissions less than one pound per day and not subject to paragraph (g)(8), the unit becomes 30 years old.

(h) Technology Assessment

- (1) On or before December 7, 2015, the Executive Officer shall conduct a technology assessment and shall report to the Governing Board on the availability of burner systems and units for processes with NOx emissions of one pound per day or less.

(i) Mitigation Fee Compliance Option

- (1) An owner or operator of a unit with emissions of ~~more than~~ 1 pound per day or more may elect to delay the applicable compliance date in Table 2 of paragraph (c)(1) or (c)(4) three years by submitting an alternate compliance plan and paying an emissions mitigation fee to the District in lieu of meeting the applicable NOx emission limit in Table 1.
- (2) Compliance Demonstration  
An owner or operator of a unit electing to comply with the mitigation fee compliance option shall:
  - (A) Submit an alternate compliance plan and pay the mitigation fee to the Executive Officer at least 150 days prior to the applicable compliance date in Table 2 of paragraph (c)(1) or (c)(4), and
  - (B) Maintain on-site a copy of verification of mitigation fee payment and ~~AQMD~~District approval of the alternate compliance plan that shall be made available upon request to ~~AQMD~~District staff.
- (3) Plan Submittal  
The alternate compliance plan submitted pursuant to paragraphs (i)(1) and (i)(2) shall include:

- (A) A completed AQMDistrict Form 400A with company name, AQMDistrict Facility ID, identification that application is for a compliance plan (section 7 of form), and identification that request is for the Rule 1147 mitigation fee compliance option (section 9 of form);
- (B) Attached documentation of unit fuel use for previous 5 years, description of weekly operating schedule, unit permit ID, unit heat rating (Btu/hour), and fee calculation;
- (C) Filing fee payment; and
- (D) Mitigation fee payment as calculated by Equation 1.

Equation 1:

$$MF = R \times (3 \text{ years}) \times (L_1 - L_0) \times (AF) \times (k)$$

Where,

MF = Mitigation fee, \$

R = Fee Rate = \$12.50 per pound (\$6.25 per pound for a small business with 10 or fewer employees and gross annual receipts of \$500,000 or less)

$L_1$  = Default NOx emission factor, 0.136 lbs of NOx/mmBtu for natural gas and LPG, and 0.160 lb/mmBtu for fuel oils

$L_0$  = Applicable NOx emission limit specified in Table 1 in lbs/mmBtu

AF = Annual average fuel usage of unit for previous 5 years, mmscf/yr for natural gas or gallons for liquid fuel

k = unit conversion for cubic feet of natural gas to Btu = 1,050 Btu/scf, 95,500 Btu/gallon for LPG, and 138,700 Btu/gallon for fuel oil

## ATTACHMENT G

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

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## **Final Staff Report** **Proposed Rule 1147 – NO<sub>x</sub> Reductions from Miscellaneous Sources**

**June 2017**

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GOVERNING BOARD**

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Speaker of the Assembly Appointee

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WAYNE NASTRI

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**EXECUTIVE SUMMARY**

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## EXECUTIVE SUMMARY

Proposed Amended Rule 1147 (PAR 1147) is intended to provide relief to businesses and other regulated operations by extending compliance dates for small and low emission units and providing other flexibility that will reduce implementation costs and facilitate compliance. In addition, PAR 1147 clarifies exemptions and other requirements and will benefit the regulated community. PAR 1147 will result in delayed emissions reductions but will achieve most of the NO<sub>x</sub> reductions as the current SIP approved rule.

Rule 1147 was adopted on December 5, 2008 and is a vital component of the attainment strategy to meet the federal PM<sub>2.5</sub> ambient air quality standards by 2014 as well as meet the ozone standards. Rule 1147 is based on two control measures from the 2007 Air Quality Management Plan (AQMP): NO<sub>x</sub> reductions from Non-RECLAIM Ovens, Dryers and Furnaces (CMB-01) and Facility Modernization (MSC-01). Rule 1147 established nitrogen oxide (NO<sub>x</sub>) emission limits for a wide variety of combustion equipment and affects both new and existing (in-use) combustion equipment.

Under Rule 1147, equipment requiring SCAQMD permits that are not regulated by other NO<sub>x</sub> rules must meet an emission limit of 30 or 60 parts per million (ppm) of NO<sub>x</sub> depending upon equipment type and process temperature. Compliance dates for emission limits are based on the date of equipment manufacture and emission limits are applicable to older equipment first. Owners of existing equipment are provided at least 15 years of use before they must meet rule emission limits and the first units that must meet the emission limits are 25 to 50 years old. Specific categories of newer units have later compliance dates. Smaller and low emission units currently get five more years to comply with emission limits than larger units. These small sources are not subject to rule emission limits until they are at least 20 years old. These units are required to demonstrate compliance with rule emission limits starting July 1, 2017.

Rule 1147 also established test methods and provides alternate compliance options including a process for certification of equipment NO<sub>x</sub> emissions through an SCAQMD approved testing program. Certification eliminates the requirement for end-users to test their equipment. Other rule requirements include equipment maintenance and recordkeeping.

Rule 1147 was amended September 9, 2011 to delay implementation dates one to two years, remove a requirement for fuel or time meters and provide compliance flexibility for small and large sources. In addition, the rule amendment added a requirement for an assessment of rule impacts on small sources through an updated evaluation of technologies and cost for retrofitting small and low emission sources (less than one pound per day NO<sub>x</sub>) that are not typically subject to the best available control technology (BACT) requirement as new sources.



SCAQMD staff is proposing to amend Rule 1147 to incorporate stakeholders' technical concerns, recommendations made in a technology assessment for small sources, and provide compliance options for issues that have been raised by stakeholders. The key elements of the proposed amendment are as follows:

- Remove the requirement to comply with an emission limit for units with a heat input rating of less than 325,000 Btu/hour [ Table 1, (c)(1) ]. These units would still be subject to maintenance and recordkeeping requirements;
- Change the NO<sub>x</sub> emission limit for low temperature afterburners, burn-off ovens, incinerators, and related equipment from 30 ppm to 60 ppm [ Table 1, (c)(1) ];
- Change the compliance date for small in-use units (with NO<sub>x</sub> emissions of less than one pound per day) from a schedule based on a 20 year lifetime to a 30 year lifetime or when the units are replaced or retrofit [ (c)(1) and (c)(6) ];
- Change the compliance date for existing in-use heated process tanks and pressure washers from a schedule based on a 15 to 20 year lifetime to when the units are replaced or retrofit. These units would not be required to comply with an emission limit at any specific age and may be relocated with a facility move [ (g)(8) and (g)(11) ];
- Add a testing exemption for ultra-low NO<sub>x</sub> infrared burners [ (g)(9) ];
- Provide compliance flexibility for low emission units by clarifying options for demonstrating emissions less than one pound per day [ (c)(6) ];
- Add an exemption for units with emission less than 1 pound per day when a company relocates a facility and remains under the same ownership [ (g)(11) ];
- Add an exemption for units that become subject to the rule upon amendment of Rule 219 [ (g)(10) ];
- Add flexibility for demonstrating compliance with emission limits including an alternative compliance demonstration option based on a manufacturer's performance guarantee [ (d)(1) – (d)(11) ];
- Clarify an exemption for food ovens [ (a), (g)(1), and (g)(2) ]; and
- Clarify an exemption for flare type systems [ (g)(3)(E) ].

The proposed amendment adds and clarifies a number of exemptions for a variety of equipment categories. An exemption from the requirement to comply with the emission limit at 30 years of age is proposed for heated process tanks and conveyORIZED pressure washer systems because it is difficult to retrofit existing units without replacing the whole unit. An exemption from complying with an emission limit is proposed for low emission units (less than 1 pound per day) that are relocated because an entire facility is relocated. This relocation exemption for these small and low emission units is available when the

facility owner and company remain the same for 36 months before and 36 months after the facility is moved. An exemption is also proposed for units that become subject to the rule upon amendment of SCAQMD Rule 219. A testing exemption for infrared burners is being proposed because these systems have NO<sub>x</sub> emission much less than 30 ppm. The proposed amendment also completes the exemption of food ovens from Rule 1147 and clarifies an exemption for flare based incineration systems which cannot be retrofit with different combustion systems.

If implemented, PAR 1147 is expected to result in NO<sub>x</sub> emission reductions foregone of up to 0.9 ton per day in 2017. However, most of the emission reductions foregone will be recaptured starting in 2017 because the existing units will be regularly replaced and upgraded over time. Staff estimates that less than 0.05 ton/day of NO<sub>x</sub> emissions will be permanently foregone because of the proposed changes to emission limits and exemptions including units 325,000 Btu or smaller, heated process tanks and spray washers, and the proposed changes to emission limits. This is about 5 percent of the 0.9 ton per day foregone due to delay of compliance dates.

## **CHAPTER 1: BACKGROUND**

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**INTRODUCTION**

**REGULATORY HISTORY**

**AFFECTED INDUSTRIES**

**PUBLIC PROCESS**

## INTRODUCTION

The California Health and Safety Code requires the SCAQMD to adopt an Air Quality Management Plan (AQMP) to meet state and federal ambient air quality standards and adopt rules and regulations that carry out the objectives of the AQMP. The California Health and Safety Code also requires the SCAQMD to implement all feasible measures to reduce air pollution.

SCAQMD Rule 1147 was adopted December 2008 to seek reductions from NO<sub>x</sub> emission equipment not regulated by other SCAMD rules and, because of the number and variety of equipment affected, the rule compliance schedule was phased in over 10 years. The NO<sub>x</sub> reductions from Rule 1147 are a vital component of our attainment strategy and essential for achieving compliance with federal and state ambient air quality standards for PM<sub>2.5</sub>, PM<sub>10</sub>, and ozone.

## REGULATORY HISTORY

Rule 1147 – NO<sub>x</sub> Reductions from Miscellaneous Sources, was adopted by the SCAQMD Governing Board on December 5, 2008. Rule 1147 incorporates two control measures of the 2007 Air Quality Management Plan (AQMP): NO<sub>x</sub> Reductions from Non-RECLAIM Ovens, Dryers and Furnaces (CMB-01) and Facility Modernization (MSC-01).

Control measure MCS-01 proposed that equipment operators meet best available control technology (BACT) emission limits at the end of the equipment's useful life. Control measure CMB-01 proposed emission NO<sub>x</sub> limits in the range of 20 ppm to 60 ppm (referenced to 3% oxygen) for ovens, dryers, kilns, furnaces and other miscellaneous combustion equipment. Emission reductions from the equipment addressed by Rule 1147 and control measure CMB-01 of the 2007 AQMP were proposed in prior AQMPs (e.g., Control Measure CMB-02 from the 1997 AQMP).

Rule 1147 established nitrogen oxide (NO<sub>x</sub>) emission limits for a wide variety of combustion equipment and affects both new and existing (in-use) combustion equipment. Rule 1147 requires equipment with SCAQMD permits that are not regulated by other NO<sub>x</sub> rules to meet an emission limit of 30 to 60 parts per million (ppm) of NO<sub>x</sub> depending upon equipment type and process temperature. Compliance dates for emission limits are based on the date of equipment manufacture and emission limits are applicable to older equipment first. Owners of existing equipment are provided at least 15 years of use before they must meet rule emission limits. Specific categories of newer units have later compliance dates. The first units required to comply with the emission limits were 20 to 50 years old. In addition, small sources are provided five more years to comply with emission limits when they are at least 20 years old. The owners of small units and

units with emissions of less than one pound per day have later compliance dates starting in July 1, 2017.

Rule 1147 also established test methods and provides alternate compliance options including a process for certification of equipment NO<sub>x</sub> emissions through an SCAQMD and EPA approved testing program. Other rule requirements include equipment maintenance and recordkeeping.

Rule 1147 was amended September 9, 2011 to delay implementation dates one to two years, and remove a requirement for fuel or time meters and provide compliance flexibility for small and large sources. In addition, the rule amendment added a requirement for an assessment of rule impacts on small sources through an updated evaluation of technologies and cost for retrofitting small and low emission sources that are not typically subject to the best available control technology (BACT) requirement as new sources.

A draft technology assessment was made available to the public in January 2016. Since the release of the draft technology assessment, staff met with stakeholders at a Rule 1147 Task Force meeting in February 2016, selected a contractor to review the technology assessment with the input of stakeholders, arranged for the reviewer to meet with stakeholders at two Rule 1147 Task Force meetings, and SCAQMD staff completed the technology assessment. A Draft Technology Assessment was submitted to the Governing Board at the March 4, 2016 meeting. The Technology Assessment was reviewed by a third party contractor selected by a panel that included stakeholders. The third party reviewer also received comments from stakeholders and completed their review in October 2016. After additional input from stakeholders, the Technology Assessment was finalized in February 2017 and provided with the preliminary draft rule amendment and staff report for the Public Workshop on February 15, 2017.

The proposed amended rule is based on the recommendations of the technology assessment and independent third party review. In addition, the proposed amendment includes recommendations and requests from stakeholders that were made during development, after publication of the technology assessment, and during the rule development process.

## **AFFECTED INDUSTRIES**

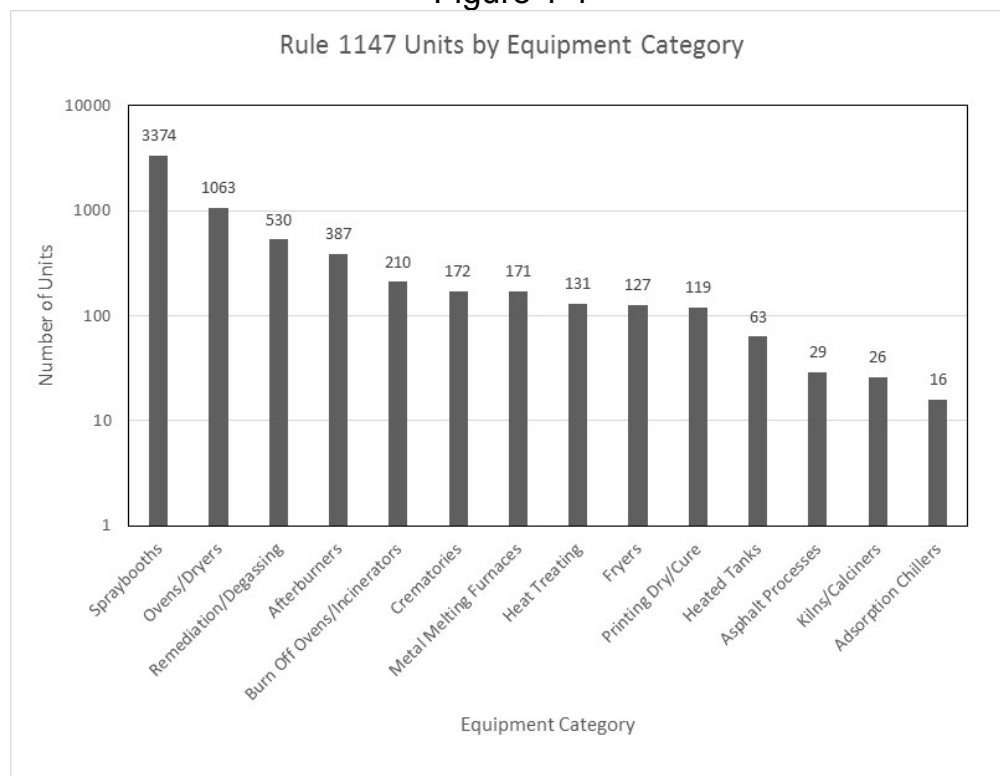
A wide variety of processes use equipment that is regulated by Rule 1147. These processes include, but are not limited to, food products preparation, printing, textile processing, product coating; and material processing. A large fraction of the equipment subject to Rule 1147 heats air that is then directed to a process chamber and transfers heat to process materials. Other processes heat materials directly such kilns, process tanks and metallurgical furnaces.

Rule 1147 affects manufacturers (NAICS 31-33), distributors and wholesalers (NAICS 42) of combustion equipment, as well as owners and operators of ovens, dryers, furnaces, and other equipment in the District (NAICS 21, 23, 31-33, 42, 44, 45, 48, 49, 51-56, 61, 62, 71, 72, 81, and 92). The units affected by the rule are used in industrial, commercial and institutional settings for a wide variety of processes. Some examples of the processes regulated by the rule include metal casting and forging, coating and curing operations, asphalt manufacturing, baking and printing.

Staff originally estimated approximately 6,600 units subject to the emission limits of Rule 1147 are located at approximately 3,000 facilities. Staff estimated that about 1,600 units at about 800 facilities affected meet the NO<sub>x</sub> emission limits of Rule 1147. This leaves about 2,200 facilities that are expected to require retrofit of burners in their equipment. Staff estimated as many as 2,500 permitted units with NO<sub>x</sub> emission limits one pound per day or more and an additional 2,500 permitted units with NO<sub>x</sub> emission limits of less than one pound per day will require modifications to comply with the emission limits.

Based on an update of the active permitted equipment in the SCAQMD, an estimate of the number of equipment potentially subject to Rule 1147 and the fraction of units in different categories is presented in Figure 1-1. Staff estimates that as many as 6,400 pieces of equipment are potentially subject to Rule 1147 requirements. More than half of the units ( $\approx 3,400$ ) are spray booths and prep-stations. Excluding spray booths and prep-stations, staff estimates that at least one quarter of the units in each category will meet Rule 1147 emission limits without retrofitting burners.

Figure 1-1



The second largest category of equipment is ovens and dryers with approximately 1,100 units subject to the rule. Staff estimates that at least one-third of the permitted ovens will meet Rule 1147 emission limits based on a sample of the burners used in the ovens. There are also approximately 500 additional ovens and dryers with SCAQMD permits that are not subject to Rule 1147 because they are heated electrically, with infrared lamps, or using a boiler or thermal fluid heater. Electric, infrared lamp, and boiler and thermal fluid heated ovens and dryers are not included in the Figure 1-1.

The third largest group of equipment is air pollution control units that capture and incinerate VOCs, CO, PM and toxics. There are approximately 900 afterburners, degassing units and remediation units. The remaining categories of equipment have significantly fewer units with high temperature processes (metal melting, heat treating, burn off ovens, kilns and crematories) being the next largest group with approximately 700 units in these five categories. Although these categories have fewer equipment, many units have significantly higher emissions than spray booths and small ovens. The technology assessment included in Appendix B provides a more detailed summary of the industries and equipment categories affected by Rule 1147.

Based on permitted emissions and information provided by manufacturers, vendors and businesses, staff has calculated an emissions inventory of 3.0 to 5.2 tons of NO<sub>x</sub> per day from the equipment regulated by Rule 1147. Spray booths ( $\approx$  3,400 units) contribute about 0.5 to 0.6 tons per day. Other types of equipment with permit limits of less one pound per day ( $\approx$  1,500 units) have NO<sub>x</sub> emissions totaling about 0.4 tons per day. Equipment with a potential to emit of one pound per day or more ( $\approx$  1,500 units) contribute NO<sub>x</sub> emissions of 2.1 to 4.2 tons per day. These emission estimates are consistent with the 6.2 tons per day emission estimate developed from the 2007 AQMP for adoption of Rule 1147 in 2008.

It should be noted that the AQMP inventory was based on fuel use and default emission factors. The 2007 AQMP inventory did not take into account lower emissions from units that met BACT emission limits. Using the midpoint of the estimated range from the above calculation for larger sources gives a total inventory estimate for all equipment of about 4.1 tons of NO<sub>x</sub> per day. This estimate is consistent with the AQMP inventory and permit information that at least one quarter of the units have burners that can comply with BACT and Rule 1147 emission limits.

In addition, staff estimates that as many as half of the units (750 out of 1,500) with a potential to emit one pound per day or more may have actual daily NO<sub>x</sub> emissions less than a pound per day. Many of these units with actual emissions less than one pound per day have BACT and Rule 1147 compliant burners that significantly reduce their emissions. If this estimate is correct, then more than half of units with emissions of one pound per day or more of NO<sub>x</sub> (about 375) have already submitted test protocols and test results. Moreover, because of the Rule 1147 compliance schedule, the remaining half of the 750 units with emission of one pound per day or more have been permitted since the

late 1990s and installed burners that comply with BACT and Rule 1147 NO<sub>x</sub> emission limits.

## **PUBLIC PROCESS**

The proposed changes to Rule 1147 are a product of a multiyear effort to assess low NO<sub>x</sub> technology and cost-effectiveness of retrofitting small and low emission affected by Rule 1147. Since the September 2011 amendment of Rule 1147, staff has met with representatives from affected businesses, equipment vendors, manufacturers, trade organizations, and other interested parties. Including the rule development efforts to adopt SCAQMD Rule 1153.1 in 2014, amend Rule 219 in 2013 and the technology assessment, staff has held two or more task force meetings every year since 2012.

During the development of the technology assessment staff visited several printing businesses, food manufacturing facilities, and a local manufacturer of ovens and burn-off furnaces. In 2016, staff held three meetings of the Rule 1147 Task Force in order to receive additional input on the draft technology assessment with the last meeting on November 8, 2016. Recently, staff has also met with and visited local businesses including a manufacturer of conveyORIZED pressure washers, a metal finishing company, and a large printing company to observe operations and equipment affected by Rule 1147. For this current proposed amendment, Rule 1147 Task Force meetings were held on January 17 and April 20, 2017. A Public Workshop and CEQA scoping meeting for PAR 1147 was held on February 15, 2017.



## **CHAPTER 2: SUMMARY OF PROPOSED RULE 1147**

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**PROPOSED AMENDED RULE REQUIREMENTS**

**NO<sub>x</sub> EMISSION LIMIT CHANGES**

**EXEMPTIONS**

**OPTIONS FOR DEMONSTRATING UNIT EMISSIONS**

**OPTIONS FOR COMPLIANCE WITH EMISSION LIMITS**

**RELOCATION EXEMPTION FOR LOW EMISSION UNITS**

## PROPOSED AMENDED RULE REQUIREMENTS

SCAQMD staff is proposing to amend Rule 1147 to reflect the recommendations made in the Rule 1147 Technology Assessment for Small and Low Emission Sources and the third party review of the technology assessment. In addition, staff proposes to provide additional compliance options for issues that have been raised by stakeholders. The key elements of the proposed amendment are as follows:

- Remove the requirement to comply with an emission limit for units with a heat input rating of less than 325,000 Btu/hour [ (c)(1) ]. These units would still be subject to maintenance and recordkeeping requirements to minimize emissions;
- Change the NO<sub>x</sub> emission limit for low temperature afterburners, burn-off ovens, incinerators, and related equipment from 30 ppm to 60 ppm [ Table 1, (c)(1) ];
- Change the compliance date for small in-use units (with NO<sub>x</sub> emissions of less than one pound per day) from a schedule based on a 20 year lifetime to a 30 year lifetime or when the units are replaced or retrofit [ (c)(1) and (c)(6) ];
- Change the compliance date for existing heated process tanks and pressure washers from a schedule based on a 15 to 20 year lifetime to when the units are replaced or retrofit. These units are not required to comply with an emission limit at any specific age and may be relocated with a facility move [ (g)(8) and (g)(11) ];
- Add a testing exemption for ultra-low NO<sub>x</sub> infrared burners [ (g)(9) ];
- Provide compliance flexibility for low emission units by clarifying options for demonstrating emissions less than one pound per day [ (c)(6) ];
- Add an exemption for units with emission less than 1 pound per day when a company relocates a facility and remains under the same ownership [ (g)(11) ];
- Add an exemption for units that become subject to the rule upon amendment of Rule 219 [ (g)(10) ];
- Add flexibility for demonstrating compliance with emission limits including an alternative compliance demonstration option based on a manufacturer's performance guarantee [ (d)(1) – (d)(11) ];
- Clarify an exemption for food ovens [ (a), (g)(1), and (g)(2) ]; and
- Clarify an exemption for flare type systems [ (g)(3)(E) ].

The proposed rule amendment provides relief to affected businesses by delaying compliance dates for existing in-use small and low emission units. For units with emissions less than one pound per day of NO<sub>x</sub>, compliance dates are extended by 10 years to when a unit is 30 years old. However, most units would be replaced, have the

heating system modified or replaced, or sold to another facility or as scrap before they become 30 years old. When a unit is sold, replaced, or modified it would be required to comply with emission limits at that time.

Equipment categories with new unit compliance dates after January 1, 2010 also benefit from this 10 year extension from 20 to 30 years of age. These categories include spray booths, fryers and afterburners, degassing units, thermal oxidizers, catalytic oxidizers, vapor incinerators, and other equipment used for similar processes. However, heated process tanks, evaporators and conveyORIZED pressure washer systems would have an additional delay and would not be required to comply with an emission limit at 30 years of age.

## **NOX EMISSION LIMIT CHANGES**

The proposed amendment will raise the NO<sub>x</sub> emission limit for low temperature (less than 800 °F) afterburners, burn-off ovens, incinerators, and related equipment from 30 ppm to 60 ppm. This recommendation from the technology assessment is due to the emission characteristics of the preferred burner technology used in these incineration processes. In addition, the proposed amendment removes the emission limit for units with heat ratings of 325,000 Btu per hour or less. While these units would not be subject to emission limits under the proposed amendment, they would still be subject to the maintenance requirements in the rule. In addition, new units are potential subject to BACT requirements of new source review (SCAQMD Regulation XIII).

## **EXEMPTIONS**

The proposed rule adds and clarifies a number of exemptions for a variety of equipment categories. An exemption from the 30 years compliance date is proposed for heated process tanks and conveyORIZED pressure washer systems because it is difficult to retrofit existing units without replacing the whole unit. A testing exemption for infrared burners is being proposed because these systems have NO<sub>x</sub> emission much less than 30 ppm. An exemption from complying with an emission limit is being proposed for low emission units (less than 1 pound per day) that are relocated because an entire facility is relocated. This relocation exemption for these small and low emission units is available when the facility owner and company remain same for 36 months before and 36 months after the facility is moved. An exemption is also proposed for units that become subject to the rule upon amendment of SCAQMD Rule 219 which defines when equipment require an SCAQMD permit. The proposed amendment also completes the exemption of food ovens from Rule 1147 and clarifies an exemption from the rule for flare based incineration systems which cannot be retrofit with different combustion systems.

## OPTIONS FOR DEMONSTRATING UNIT EMISSIONS

The proposed amendment will provide additional flexibility and reduce cost to affected businesses. PAR 1147 clarifies options for businesses to identify equipment with emissions of less than one pound per day that are eligible for later compliance that are available in the current rule and provides additional detail on those options. Equipment eligible for a later compliance date pursuant to paragraph (c)(6) can be identified through either daily or monthly recordkeeping or permit conditions with process limitations that result in emissions of less than one pound per day.

A variety of permit conditions have been used by SCAQMD to identify equipment that is not subject to BACT or offsets because they have emissions of less than one pound per day. SCAQMD has used operating limits with time or fuel meters or equipment rating to identify equipment with emissions of less than one pound per day. However, other permit conditions are also used and the following list only provides a summary of some of the types of conditions found in SCAQMD permits:

- The unit rated heat capacity specified on the permit.
- A condition in the permit with a process limit resulting in less than one pound per day of NO<sub>x</sub> emissions including but not limited to fuel use, material throughput or operating schedule. A person owning or operating a unit subject to this type of condition maintains records of unit fuel use, material throughput, operating hours or other relevant process activity.
- A permit condition limiting the number of operating hours per day or month and recordkeeping. Emissions are calculated as the unit's maximum hourly emission rate in pounds multiplied by hours of operation. The maximum hourly emission rate is equal to the rated heat input capacity of the unit multiplied by the unit's emissions at the rated heat input capacity.
- A permit condition limiting daily or monthly fuel use and recordkeeping. Emissions are calculated as the process emission rate per unit of fuel multiplied by the amount of fuel used.

PAR 1147 identifies a variety of options for units to demonstrate emissions less than one pound per day of NO<sub>x</sub>. An owner or operator of a unit may choose to add a time or fuel meter to assist recordkeeping for a unit. Addition of a meter does not require a permit modification. However, the owner/operator may request such a modification to the permit and install a time or fuel meter to help demonstrate that emissions are less than one pound per day. In addition, the owner/operator may use monthly recordkeeping to demonstrate less than a pound per day emissions if they have installed a meter.

## OPTIONS FOR COMPLIANCE WITH EMISSION LIMITS

The proposed rule provides additional testing options that are not present in the current rule. One new option for testing ovens, dryers, and other low temperature applications will provide flexibility for testing of these unit across the operating range of the combustion system in these units. The additional testing option is for when the unit is warmed up, burners are not firing at their maximum rate, and are cycling on and off or are modulating to adjust and maintain the temperature in the unit. The owner/operator and their contractor has the test the unit while the combustion system modulates or cycles on and off at the lowest set temperature for any process for which the unit is used. Emissions are averaged over the time the burners are firing to heat the unit. If the burner(s) cycle on and off, then the times the burner(s) do not fire are excluded from the calculation of average emissions. Alternatively, owner/operators may use the existing option of testing the unit when the combustion system operates at less than 35 percent of its maximum firing rate.

A second option proposed for units with heat rating of 2 million Btu per hour and lower is to allow the use of a burner manufacturer's performance guarantee. To be eligible for this compliance option, the following information would be required to be submitted to the SCAQMD as part of a permit application:

- A signed letter or bid from the burner manufacturer or authorized distributor to the owner of operator of the unit that guarantees NO<sub>x</sub> emissions of the proposed combustion system will comply with the applicable emission limit for specified processes, operating conditions, and process temperatures,
- At least five District approved missions tests of same the burner used in the same type of process and operating in the same temperature range proposed for the unit,
- A signed contract or purchase order from the owner or operator of the unit to the burner manufacturer or authorized distributor for the purchase of the combustion system identified in the manufacturers performance guarantee, and
- A signed letter from the burner manufacturer or authorized distributor to the District that guarantees NO<sub>x</sub> emissions of the proposed combustion system will comply with the applicable emission limit for specified processes, operating conditions, and process temperatures.

These items must be submitted with a permit application. In addition, the combustion system description in the guarantees and contract or purchase order must be identical to the combustion system proposed to be installed in the permit applications and installed in the unit. All required documentation must be provided at the time of an application for a District permit. The emission test results submitted to support the manufacturer guarantee must have been approved by the SCAQMD prior to submittal of the permit application. If all required documentation is not included with the permit application, the District will

issue the permit with a requirement that the owner or operator will demonstrate compliance with the emission limit through emissions testing by a specified date as required in subdivisions (c) and (d) of the rule. Any delay in providing required documentation for the manufacturer's performance guarantee by the owner or operator, manufacturer or authorized representative, or owner or operators contractor will not delay the review and approval of the permit by the District and the permit will be issued with a permit requirement to demonstrate compliance with the emission limit through emissions testing by a specified date as required in subdivisions (c) and (d) of the rule.

## **RELOCATION EXEMPTION FOR LOW EMISSION UNITS**

The proposed rule amendment includes an exemption for units with emission less than one pound per day that are moved to a new location because the entire facility was relocated. This exemption would allow an owner or to move a low emission unit with the relocated facility to a different location or consolidate one entire facility with another when both facilities are part of the same company under the same ownership. These small units would still be subject to other requirements in the rule that would trigger compliance with emission limits including but not limited to: applicable compliance dates including unit age, when the unit is replaced, and at the time of a combustion system modification and combustion system replacement. This relocation exemption is not applicable to the transfer or sale of a unit or facility to a different company, owner, or operator. This relocation exemption is not applicable to the purchase or other acquisition of a unit for installation in a different location.

## **CHAPTER 3: IMPACT ASSESSMENT**

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**IMPACT ANALYSIS**

**COST EFFECTIVENESS**

**CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) ANALYSIS**

**SOCIOECONOMIC IMPACT ASSESSMENT**

**INCREMENTAL COST EFFECTIVENESS**

**COMPARATIVE ANALYSIS**

**PUBLIC COMMENTS**

## IMPACT ANALYSIS

If implemented, PAR 1147 is expected to result in NO<sub>x</sub> emission reductions foregone of up to 0.9 tons per day in 2017. However, the emission reductions foregone will be eventually recaptured because the existing units will be regularly replaced and upgraded over time. At an average replacement rate of 4% per year, this would result in recovery of the emissions forgone in 25 years. Staff estimates that 4,900 to 5,650 out of 6,400 units are affected by these proposed changes.

NO<sub>x</sub> emission reductions foregone from equipment subject to Rule 1147 can be estimated using information on typical use provided by operators visited by SCAQMD staff and potential to emit (PTE) for affected units in SCAQMD records. Based on natural gas consumptions, business owners and equipment vendors indicate typical automotive booths and other booth operations at maintenance facilities, businesses that repair non-automotive equipment, and other specialty shops have emissions of less than one third pound (0.3 pound) NO<sub>x</sub> each day they operate. However, many booths have greater emissions because they are used for manufacturing operations or can have more than one shift per day. Up to 200 booths used in manufacturing and other large coating applications may have emissions exceeding a pound per day. In addition, while many auto body shops do not paint cars every day during the week, larger operations can operate two shifts per day.

Based on this information, the 3,400 permitted booths and spray stations are estimated to have emissions of about 0.5 ton NO<sub>x</sub> per day ( $= [3,400 \text{ units} \times \text{approximately } 0.3 \text{ pound NO}_x/\text{day per all booth types}]/[2000 \text{ pounds/ton}]$ ). About 1,500 other types of combustion equipment including, but not limited to, ovens, dryers, and furnaces also have PTE of less than one pound of NO<sub>x</sub> per day. Because there is a wide distribution of PTE estimated for these other types of equipment, average emissions from each of these units is assumed to be 0.5 pound of NO<sub>x</sub> per day for a total of 0.4 ton NO<sub>x</sub> per day from these 1,500 units ( $= [1,500 \text{ units} \times 0.5 \text{ pound NO}_x/\text{day}]/[2,000 \text{ pounds/ton}]$ ). An additional 750 units with a PTE of one pound of NO<sub>x</sub> per day or greater may have actual emissions less than one pound of NO<sub>x</sub> per day. The estimated emissions from these 750 units is about 0.3 ton NO<sub>x</sub> per day ( $= [750 \text{ units} \times 0.8 \text{ pound NO}_x/\text{day}]/[2,000 \text{ pounds/ton}]$ ).

Based on this approach, the approximately 4,900 to 5,650 units that may benefit from PAR 1147 and that have emissions of less than one pound of NO<sub>x</sub> per day are estimated to emit about 0.9 to 1.2 tons of NO<sub>x</sub> per day. The majority of equipment with emissions less than one pound of NO<sub>x</sub> per day are subject to a 30 ppm NO<sub>x</sub> emission limit which would reduce emissions by about 71 percent. However, a much smaller number of equipment that would be subject to a 60 ppm NO<sub>x</sub> limit and the emission reductions would be about 41 percent. Assuming a 66 percent reduction for the combination of equipment emission reductions of 41 percent to 71 percent, for the 4,900 to 5,650 units, the overall NO<sub>x</sub> emission reductions foregone is expected to range between approximately 0.6 (excluding the 750 other units that might have emissions less than 1



pound per day) to 0.9 ton per day. Staff estimates that less than 0.05 ton/day of NO<sub>x</sub> emissions will be permanently forgone because of the proposed changes to emission limits and exemptions. This is about 5 percent of the 0.9 ton per day forgone due to delay of compliance dates. Thus, PAR 1147 will result in significant adverse air quality impacts. However, with the exception of about 0.05 ton/day, these emission reductions forgone will be made up as new rule compliant equipment replaces existing units.

## **COST EFFECTIVENESS**

PAR 1147 will change the schedule for full implementation of the rule and provide other compliance flexibilities including making some emission limits less stringent. There is no additional cost for this proposed amendment and a cost effectiveness analysis is not applicable. The proposed changes to the requirements of PAR 1147 are designed to address issues related to technical feasibility and reduce cost to affected businesses.

## **CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) ANALYSIS**

The California Environmental Quality Act (CEQA), Public Resources Code Section 21000 *et seq.*, requires environmental impacts of proposed projects to be evaluated and feasible methods to reduce, avoid or eliminate significant adverse impacts of these projects to be identified and implemented. The lead agency is the “public agency that has the principal responsibility for carrying out or approving a project that may have a significant effect upon the environment” (Public Resources Code § 21067). Since the SCAQMD has the primary responsibility for supervising or approving the entire project as a whole, which is a proposed SCAQMD rule, it is the most appropriate public agency to act as lead agency (CEQA Guidelines<sup>1</sup> § 15051(b)).

The currently proposed amendments to Rule 1147 (PAR 1147) are considered to be modifications to a previously approved project (the adoption of Rule 1147 on December 5, 2008 and the amendments to Rule 1147 on September 9, 2011) and are ~~PAR 1147 is considered to be~~ a “project” as defined by CEQA. CEQA requires that all potential adverse environmental impacts of proposed projects be evaluated and that methods to reduce or avoid identified significant adverse environmental impacts of these projects be implemented if feasible. The purpose of the CEQA process is to inform the SCAQMD Governing Board, public agencies, and interested parties of potential adverse environmental impacts that could result from implementing the proposed project and to identify feasible mitigation measures or alternatives, when an impact is significant.

Public Resources Code Section 21080.5 allows public agencies with regulatory programs to prepare a plan or other written documents in lieu of an environmental impact report once the secretary of the resources agency has certified the regulatory program. The SCAQMD's regulatory program was certified by the secretary of resources agency on March 1, 1989, and has been adopted as SCAQMD Rule 110 – Rule Adoption Procedures

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<sup>1</sup> The CEQA Guidelines are codified at Title 14 California Code of Regulations § 15000 *et seq.*

to Assure Protection and Enhancement of the Environment. Pursuant to Rule 110 (the rule which implements the SCAQMD's certified regulatory program), SCAQMD prepared a Notice of Preparation/Initial Study (NOP/IS) which identified environmental topics to be analyzed in a Draft Environmental Assessment (EA). The NOP/IS provided information about the proposed project to other public agencies and interested parties prior to the intended release of the Draft EA. The NOP/IS was distributed to responsible agencies and interested parties for a 30-day review and comment period from February 1, 2017, to March 3, 2017. The initial evaluation in the NOP/IS identified the topic of operational air quality as potentially having potentially significant adverse impacts requiring further review. During the public comment period, the SCAQMD received two comment letters relative to the NOP/IS.

Following the release of the NOP/IS, further analysis of the proposed project indicated that the type of CEQA document appropriate for the proposed project is a Subsequent Environmental Assessment (SEA), in lieu of an EA. The SEA is a substitute CEQA document, prepared in lieu of a Subsequent EIR (CEQA Guidelines § 15162(b)), pursuant to the SCAQMD's Certified Regulatory Program (CEQA Guidelines § 15251(l); codified in SCAQMD Rule 110). Therefore, a SEA is appropriate because new information of substantial importance, which was not known and could not have been known at the time the Final EA was certified for the adoption of Rule 1147 in December 2008 (referred to herein as the December 2008 Final EA) and the Final Subsequent EA that was certified for the amendments to Rule 1147 in September 2011 (referred to herein as the September 2011 Final SEA), became available (CEQA Guidelines § 15162(a)(3)). Further, PAR 1147 is expected to have significant effects that were not discussed in the previous December 2008 Final EA or September 2011 Final SEA (CEQA Guidelines § 15162(a)(3)(A)). In the event that new information becomes available that would change a project, the lead agency shall prepare a subsequent Environmental Impact Report (EIR) (CEQA Guidelines § 15162(b)). However, under SCAQMD's certified regulatory program, an equivalent document, a subsequent EA, can be a substitute for preparing a subsequent EIR.

The SEA is also a public disclosure document intended to: 1) provide the lead agency, responsible agencies, decision makers and the general public with information on the environmental impacts of the proposed project; and 2) be used as a tool by decision makers to facilitate decision making on the proposed project.

Thus, the SCAQMD, as lead agency for the proposed project, prepared a Draft SEA pursuant to its Certified Regulatory Program. The Draft SEA identified and analyzed the topic of operational air quality as the only area that may have significant adverse impacts if the proposed project is implemented because PAR 1147 is expected to result on NOx emission reductions foregone of up to 0.9 tons per day in 2017. The Draft SEA concluded that only the topic of operational air quality emission impacts would have significant adverse impacts. Because PAR 1147 may have statewide, regional or

areawide significance, a CEQA scoping meeting was required for the proposed project pursuant to Public Resources Code § 21083.9(a)(2) and was held at the SCAQMD's Headquarters in conjunction with the Public Workshop on February 15, 2017. Further, pursuant to CEQA Guidelines § 15252, since significant adverse impacts were identified, an alternatives analysis and mitigation measures are required and are included in the SEA.

The Draft SEA was released for a 46-day public review and comment period from March 24, 2017 to May 9, 2017 and one two comment letters ~~was~~ were received. None of the comments in ~~this~~ these letters identified other potentially significant adverse impacts from the proposed project. The comments made at the CEQA scoping meeting and the responses to these comments are included in Appendix D of the Final Draft SEA. The comment letters received relative to the NOP/IS and the responses to the comments are included in Appendix E of the Final Draft SEA. In addition, the all comments ~~letter~~ received during the public comment period on the analysis presented in the Draft SEA ~~has~~ will be responded to and is included in an appendix to the Final SEA (see Final SEA Appendix F).

Since the release of the Draft SEA, minor modifications were made to PAR 1147 and some of the revisions were made in response to verbal and written comments on the project's effects. Staff has reviewed the modifications to PAR 1147 and concluded that none of the modifications constitute significant new information or a substantial increase in the severity of an environmental impact, nor provide new information of substantial importance relative to the draft document. In addition, revisions to PAR 1147 in response to verbal or written comments would not create new, avoidable significant effects. As a result, these minor revisions do not require recirculation of the Draft SEA pursuant to CEQA Guidelines § 15088.5. Thus, the Draft SEA has been revised to reflect the aforementioned modifications and to include the comment letters and responses to comments such that it is now a Final SEA.

The previously certified December 2008 Final EA, September 2011 Final SEA, supporting documentation, and record of approval of the December 2008 adoption and the September 2011 amendments are available upon request by calling the SCAQMD Public Information Center at (909) 396-2677 or by visiting SCAQMD's website at [www.aqmd.gov](http://www.aqmd.gov). The direct link to the December 2008 Final EA can be found at: <http://www.aqmd.gov/docs/default-source/ceqa/documents/aqmd-projects/2008/final-environmental-assessment-for-proposed-rule-1147.pdf>. The direct link to the September 2011 Final SEA can be found at: <http://www.aqmd.gov/docs/default-source/ceqa/documents/aqmd-projects/2011/final-subsequent-environmental-assessment-for-proposed-amended-rule-1147.pdf>. Also, as part of certifying the September 2011 Final SEA, the Governing Board adopted Findings, a Statement of Overriding Considerations, and Mitigation Monitoring Plan (referred to as Attachment 1 to the Governing Board Resolution for the September 2011 Final SEA) and the direct link to this document can be found at: <http://www.aqmd.gov/docs/default-source/ceqa/documents/aqmd-projects/2011/attachment-1-to-the-governing-board-resolution-for-par-1147.pdf>.

Prior to making a decision on the adoption of PAR 1147, the SCAQMD Governing Board must review and certify the Final SEA, including responses to comments, as providing

adequate information on the potential adverse environmental impacts that may occur as a result of adopting PAR 1147.

## **SOCIOECONOMIC IMPACT ASSESSMENT**

PAR 1147, if adopted, would 1) exempt units rated less than 325,000 Btu per hour from an emission limit; 2) make emission limits less stringent for low temperature afterburners, burn-off ovens, incinerators, and related equipment; 3) extend the compliance schedule for small and low emission existing in-use units (i.e., with NOx emissions of less than one pound per day) and all existing in-use heated process tanks and pressure washers; 2) make emission limits less stringent for equipment in certain specified categories; 34) allow owners of exempt small and low emission existing in-use low emission units to relocate a unit without requiring the unit to demonstrate compliance with from the rule emission limit when the unit is moved during a company relocates an entire facility relocation; and 45) exempt any unit that becomes subject to the rule upon amendment of Rule 219 on or after May 5, 2017 until the unit is replaced, modified or must comply with a compliance date in Table 2 of the rule or becomes 30 years old. increase the age limit from 20 to 30 years for required compliance demonstration among all equipment with NOx emissions less than one pound per day. These proposed amendments are based on technical feasibility considerations that were validated through a technology assessment and intended to provide flexibility that would delay and/or reduce implementation costs to affected businesses and facilitate compliance. PAR 1147 would additionally add a test exemption for ultra-low NOx direct-fired infrared burners that would reduce compliance cost. Moreover, owners or operators of units with a unit heat rating of 2 million Btu/hour or less would be provided with the option to submit with its permit application a burner manufacturer's performance guarantee in lieu of the emission testing requirement. This option could further reduce compliance cost for these owners or operators. The remaining amendments, proposed to clarify exemptions and other requirements, would benefit the regulated community in general but would have few cost impacts as they are administrative in nature.

The units regulated by Rule 1147 that potentially may be affected by the proposed amendments are used in a wide variety of industries, as discussed in the "Affected Industries" section of this staff report. As PAR 1147 is expected to result in delayed and reduced compliance costs, there would be no adverse regional economic impacts as a result of the proposed amendments.

There are four CEQA alternatives to the proposed amendments. Alternative A is the No Project Alternative where the proposed amendments would not be adopted. Alternative B considers a more stringent age requirement for compliance demonstration (25 years) than the proposed amendments but still less stringent than the existing rule. At the same time, it does not provide a relocation exemption and is thus as stringent as the existing rule in this regard. However, it considers additionally requiring compliance with emission limits

when multiple similar process units at a facility have combined NO<sub>x</sub> emissions greater than one pound per day—a requirement more stringent than the existing rule. Alternative C considers a less stringent age requirement (none) than both the proposed amendments and the existing rule. It also considers exempting all pressure washers from complying with any emission limit, which is less stringent than the proposed amendments or existing rule. Similar to Alternative C, Alternative D considers no age requirement for compliance demonstration and compliance exemption for all pressure washers; moreover, it also considers exempting all units with NO<sub>x</sub> emissions less than one pound per day<sup>2</sup> (demonstrated through recordkeeping), making it the least stringent CEQA alternative of all.

Therefore, compared to the existing rule, PAR 1147 and CEQA Alternatives C and D are expected to result in delayed (due to less stringent compliance schedule) and avoided (due to additional exemptions) incurrence of compliance cost and overall cost-savings. CEQA Alternative A would not result in any cost impact as it maintains the status quo. CEQA Alternative B would delay the compliance schedule by up to five years due to its less stringent age requirement than what is in the existing rule, thereby resulting in maximally five years of compliance cost avoided. ~~However, additional compliance cost is also expected, as~~ In the meantime, Alternative B considers an additional compliance requirement for facilities with combined NO<sub>x</sub> emissions greater than one pound per day from multiple similar process units. Therefore, some compliance costs could potentially occur sooner than in the proposed project and offset some of the avoided compliance costs related to the proposed delayed compliance schedule. However, based on the profiles of currently permitted equipment, this additional requirement as considered in Alternative B would be potentially applicable to only a small number of facilities, if any. Therefore, it is expected that, on the net, ~~In the case where a large number of facilities would be subject to this requirement,~~ Alternative B ~~could potentially~~ would not result in additional compliance costs beyond what is expected to be incurred by the affected facilities for compliance with current rule requirements and the proposed project.

## ~~**DRAFT FINDINGS UNDER CALIFORNIA HEALTH AND SAFETY —CODE SECTION 40727**~~

~~California Health and Safety Code Section 40727 requires that prior to adopting, amending or repealing a rule or regulation, the SCAQMD Governing Board shall make findings of necessity, authority, clarity, consistency, non-duplication, and reference-based on relevant information presented at the public hearing and in the staff report. In order to determine compliance with Sections 40727, 40727.2 require a written analysis comparing the proposed amended rule with existing regulations.~~

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<sup>2</sup> Overall, under Alternative D, exemptions would apply to low emission units whose emissions limits would be changed under the proposed project, heated tanks and pressure washers, and units rated less than ~~or equal to~~ 325,000 Btu/hour.

The following provides the draft findings.

**Necessity:** ~~A need exists to amend Rule 1147 to provide additional time to implement the technology to meet the NOx emission limits.~~

**Authority:** ~~The SCAQMD obtains its authority to adopt, amend, or repeal rules and regulations from California Health and Safety Code Sections 39002, 40000, 40001, 40440, 40440.1, 40702, 40725 through 40728, 41508, and 41700.~~

**Clarity:** ~~PAR 1147 has been written or displayed so that its meaning can be easily understood by the persons affected by the rule.~~

**Consistency:** ~~PAR 1147, which was approved into the State Implementation Plan on December 28, 2016, is in harmony with, and not in conflict with or contradictory to, existing federal or state statutes, court decisions or federal regulations.~~

**Non-Duplication:** ~~PAR 1147 does not impose the same requirement as any existing state or federal regulation, and is necessary and proper to execute the powers and duties granted to, and imposed upon the SCAQMD.~~

**Reference:** ~~In amending this rule, the following statutes which the SCAQMD hereby implements, interprets or makes specific are referenced: Health and Safety Code sections 39002, 40001, 40702, 40440(a), and 40725 through 40728.5.~~

## INCREMENTAL COST-EFFECTIVENESS

Health and Safety Code Section 40920.6 requires an incremental cost-effectiveness analysis for Best Available Retrofit Control Technology (BARCT) rules or emission reduction strategies when there is more than one control option that would achieve the emission reduction objective of the proposed amendments, relative to ozone, CO, SOx, NOx, and their precursors.

The only option for reducing NOx emission from equipment affected by PAR 1147 is the use of low NOx burners. While units are available that use electricity or boilers to provide heat, these equipment are either not regulated by the SCAQMD (electric ovens and furnaces) or are regulated by other SCAQMD rules (e.g., Rules 1146, 1146.1 and 1146.2). In addition, because PAR 1147 does not impose more stringent emission limits or other requirements, this provision does not apply to the proposed amendment.

## COMPARATIVE ANALYSIS

Under Health and Safety Code Section 40727.2, the SCAQMD is required to perform a comparative written analysis when adopting, amending, or repealing a rule or regulation

that has the potential to impose, a new emissions limit, or other air pollution control requirements. The comparative analysis is relative to existing federal or state requirements, existing or proposed SCAQMD rules and air pollution control requirements and guidelines that are applicable to industrial, institutional, and commercial combustion equipment.

The SCAQMD is not aware of any state or federal requirements regulating air pollution that are applicable to new or in-use PAR 1147 units. Because there are no state or federal requirements for PAR 1147 units, the proposed amendments are not in conflict with and do not duplicate any SCAQMD, state or federal requirement. In addition, the proposed amendment does not impose new requirements and this provision does not apply to the proposed amendment.

## **PUBLIC COMMENTS**

Comments on the preliminary draft rule were provided by stakeholders at the February 15, 2016 public workshop and by email before publication of the draft proposed rule and staff report. Copies of the written comments received after the public workshop and after publication of the draft proposed rule are provided in Appendix A. Comments received in writing or at the public workshop and SCAQMD staffs' response are summarized below.

### **Comments Received in Writing after the Public Workshop**

**Comment Letter #1:** Request the SCAQMD amend Rule 1147 as proposed in the preliminary draft rule to allow existing small incinerators and crematories with emission less than one pound per day NO<sub>x</sub> to continue to operate without having to demonstrate that they meet the rule emission limit. Alternatively have a different (higher) emission limit for units fired on propane.

**Response:** Proposed Amended Rule (PAR) 1147 will delay compliance dates for small and low emission units until they are rebuilt, replaced or reach an age of 30 years. This proposed amendment will provide equipment owners 10 additional years beyond the compliance date in the current rule. In addition, the proposed rule will raise the emission limit for lower temperature incineration processes to 60 ppm NO<sub>x</sub> which will benefit a variety of equipment and operations. These two changes in PAR 1147 will provide relief to owners of small units and provide SCAQMD the opportunity to collect additional emission data on propane fired processes that can help determine if propane fired units should be regulated separately.

**Comment Letter #2:** Support the amendment of Rule 1147 to complete the removal of food ovens and coffee roasters from the rule. However, there is uncertainty regarding future requirements for coffee roasters because Rule 1153.1 has not been amended to regulate new units. There are different roaster configurations and the SCAQMD does not

address these differences in other SCAQMD rules (Rule 1153.1, Regulation XIII (new source review and BACT) and the proposed amendment to Rule 1147.

**Response:** SCAQMD appreciates the commenter's support for the proposed rule amendment that will complete the removal of food ovens, including coffee roasters, from Rule 1147. However, let it be noted that SCAQMD rules (Regulation XIII – new source review and BACT, Rule 1153.1 and Rule 1147) do address differences in configurations of roasters, their burners and associated afterburners. Rule 1153.1 provides a testing exemption for direct fired infrared burners which are known to have low emissions (less than 30 ppm) and are used in new and many old coffee roasters. Rule 1153.1 emission limits are different than those in Rule 1147 and are based on different temperature ranges. While Rule 1147 regulates afterburners used to reduce emissions of VOCs, particulate and odors from coffee roasters, food ovens, and many other types of equipment, Rule 1153.1 allows owners of coffee roasters with afterburners to test the roaster oven and associated afterburner separately or together. In addition, for new source review and BACT under Regulation XIII, the SCAQMD has consistently treated unfired (indirect-fired) boilers, ovens, and other units differently than direct fired units. Indirect-fired equipment use heat recovered from fuel fired boilers, engines, ovens, flares, incinerators or afterburners. Under NSR and BACT, the emission limits for systems with heat recovery are the appropriate limit applied to the fuel fired process from where the heat is recovered (e.g., turbine, engine, boiler, or afterburner) and are not based on the type of unfired unit that uses the recovered heat (e.g., boiler, dryer, oven, fryer or roaster).

### **Comments Made During the Public Workshop**

**Comment:** Commend addition of a relocation exemption, but want to discuss this issue further. Also not sure what the difference is between modification and rebuilding. This proposal does not respond to the discussion in the last Stationary Source Committee meeting regarding equipment with one pound per day of emissions and Rule 222. This issue has been brought up previously and it was proposed that small sources should be transferred from the permit program to registration with recordkeeping. The rule is a financial burden on businesses in the District and should exempt most of the equipment subject to the emission limits.

**Response:** The preliminary proposal presented for amending Rule 1147 is the first step and the public workshop is an opportunity for all parties to provide input in the form of comments on the initial proposal, suggested changes to the proposal or alternative proposals for amending the rule. The proposal before you was presented to the public prior to the recent discussions at the Stationary Source Committee meeting. In addition, there is a separate parallel process that is evaluating and proposing amendments to Rules 222 and 219. The technology assessment for small units affected by Rule 1147 and the recommendations in that assessment from stakeholders, SCAQMD staff and the third party review are included in the proposed changes to the rule. The proposed amendment provides relief to businesses that operated small and low emission units affected by the



rule. This proposed rule amendment is a relaxation and provides financial relief to affected businesses. However, this proposal delays significant emission reductions and the SCAQMD will have to address this proposed delay of emission reductions in the State Implementation Plan (SIP) for meeting ambient air quality standards.

**Comment:** The printing industry supports the proposal to allow owners of equipment with emissions of less than one pound per day to move the equipment without requiring compliance with the Rule 1147 emission limit. In some industries routine maintenance includes replacing worn out components. What do you mean by the term rebuilding and what type of rebuilding would trigger the requirement to comply with the emission limit? Would rebuilding only trigger the requirement to comply with the emission limit after a specified number of years?

**Response:** SCAQMD staff has made commitments to revise the rule to provide owners of existing small and low emission units the opportunity to move their facility without having to immediately comply with the emission limit at the new location. However, it should be noted that new source review (NSR) under SCAQMD Regulation XIII has its own requirements and the proposed revision of Rule 1147 will not affect the requirements of that program. The proposed criteria for triggering compliance with the emission limit is focused on the replacement of units and rebuilding of a combustion system and associated components. SCAQMD staff will revise rule language to clarify the criteria.

**Comment:** Rule 1147 requires afterburners and other emission control devices to meet an emission limit of 60 ppm. However, BACT under new source review can require an emission limit of 30 ppm. Which emission limit must be met for a new application?

**Response:** Both emission requirements must be met by new units and that means a new unit must comply with the more stringent limit. Rule 1147 regulates new units but the focus is on existing older units. Therefore, the emission limit may not be as stringent as an emission limit for some types of new systems. New source review and BACT under Regulation XIII often have a more stringent emission requirement than rules that focus on existing equipment. This has been the case for boilers, process heaters, turbines, and engines in addition to equipment regulated under Rule 1147.

**Comment:** An oven with two burners and two exhaust stacks was tested and the unit did not pass the test. Each burner had emission less than 30 ppm. The oven should be allowed to operate.

**Response:** If the test was submitted to SCAQMD for review, it may be that there are issues with the test method or documentation of the test. If it has not been submitted for review, the testing company should provide the reasons for the unit not passing. Please discuss this case with SCAQMD staff so they can determine what issues must be resolved so that the unit would be allowed to operate.

**Comment:** What is the basis of the emission reductions foregone in the CEQA analysis? Two sections of the CEQA document related to air quality seem to contradict. Specifically the sections on emission reductions foregone and whether there is an impact on air quality. Would adding a permit condition to limit a unit's NO<sub>x</sub> emissions to less than one pound per day be an administrative change for a reduced fee?

**Response:** The explanation of the emission reductions foregone are in the Rule 1147 Technology assessment and are now discussed in the Draft Environmental Assessment for the proposed rule amendment and the rule amendment draft staff report. The two sections of the CEQA document in question are not contradictory. There are two related components of the CEQA notice of preparation (NOP) and initial study (IS). One component is whether the proposed project will adversely affect air quality? The other component is whether the emission reductions committed to in the air quality management plan (AQMP) will be achieved? The previous AQMP contained a mechanism to allow technology forcing rules to be amended without compromising the total reductions commitment in the plan (a set aside). The SCAQMD will have to address the emission reductions foregone from the proposed amendment relative to the newly adopted AQMP and achieve those reductions in another way. With regard to fees charged for adding a permit condition, it is recommended that the commenter discuss a specific application with the SCAQMD Engineering and Permitting staff. Such fees are very much application specific.

**Comment:** Request that small ovens rated 400,000 Btu per hour and less be allowed to operate 24 hours per day and be exempt from the emission limit. Also request that alternative ways of demonstrating compliance such as the facility gas bill be allowed.

**Response:** The proposed amendment to rule 1147 changes emission requirements based on technical feasibility (the availability of burners that can meet the emission limits). Low NO<sub>x</sub> burners are available that achieve 30 ppm in low temperature applications at sizes of 400,000 Btu per hour and greater. Burners that can achieve 60 ppm are available in all sizes for all applications. The proposed amendment would also eliminate the emission limit requirement for small ovens with burners rated less than or equal to 325,000 Btu per hour, although other requirements of the rule will apply.

The current rule and the proposed rule amendment allow the use of a time meter on the combustions system or the facility gas bill to demonstrate emission are less than one pound per day. Under the current rule and the proposed amended rule, existing in-use units rated 400,000 Btu/hour and many larger units will be able to operate 24 hours per day producing emissions less than one pound per day. The reason small units will not exceed the one pound per day threshold is the burner does not operate 100% of the time the unit is operating or it does not operate at maximum capacity all of the time. The proposed amendment lists a screening criteria of 16 hours a day of burner operation

(Table 3 in proposed amended Rule 1147) for units rated 325,000 to 400,000 Btu per hour. Depending upon the process, temperature, and operating cycle of the burner, units larger than 400,000 Btu per hour are also able to operate 24 hours per day without exceeding one pound per day of NOx emissions because their burners do not fire all of time after a unit reaches its set temperature. For the low cost heating system (e.g., comfort air heaters used in small dryers and ovens) some businesses use, a burner cycles between on and off and fires only a portion of the time a unit is on (i.e., 30% to 70%). In the future, SCAQMD incentive programs and adoption of Proposed Rule 1111.1 for commercial space heating furnaces will make available these type of units that will meet the Rule 1147 emission limit.

**Comment:** Request that parts washers be exempt from the rule or have an emission limit of 100 ppm NOx.

**Response:** The proposed amendment exempts existing in-use parts washers from the requirement to comply with an emission limit of 60 ppm because it is not technically feasible to replace the combustion system without replacing the whole unit. However, based on test results of new parts washers, it is technically feasible for new units to comply with the emission limit. In addition, there is more than one type of burner system that can comply with the limit. For that reason, staff's proposal requires only new units to demonstrate compliance with the NOx emission limit.

**Comment:** The SCAQMD has required auto body repair businesses to change their operation many times to comply with changing requirements. The SCAQMD forced the auto body repair industry to change to low VOC coatings which require the use of heaters to dry coatings if the booth is used for more than a few cars a day. Emissions from a booth are very low and not measurable. A business should be able to relocate a facility and continue to use its old booths at the new location without having to meet a NOx emission limit. The cost to retrofit a unit is about \$40,000. The SCAQMD should provide incentives to auto body businesses to modernize their equipment.

**Response:** The proposed rule amendment reduces requirements compared to the current rule and provides businesses additional time to comply with emission limits. The proposed amendment also allows owners of existing facilities to relocate their low emission units (less than one pound per day) with the facility to the new location without having to comply with the emission limit. The price quoted by the commenter for a new low NOx heating system for a spray booth is consistent with the prices vendors have provided to SCAQMD staff and used in the Rule 1147 technology assessment. Part of the cost for a rule compliant heating system is due to newer building code, fire code, and insurance requirements (i.e., UL and related standards). The SCAQMD Air Quality Management Plan (AQMP) does include incentive based measures for businesses to upgrade equipment and reduce emissions.

**Comment:** Metal finishing operations use heaters rated 400,000 Btu per hour for small dryers and ovens. Request that small ovens and dryers of this size be allowed to operate 24 hours per day or exempt them because they have low emissions.

**Response:** The proposed amendment requires new units rated 400,000 Btu per hour to comply with the emission limit because compliant burner systems in this size are available for low temperature operations. For existing in-use small heaters, both the proposed rule amendment and the current rule allow units of this size and greater to operate 24 hours per day because burners typically do not fire all of the time when an oven reaches the set temperature. The proposed amended rule includes tables to more clearly state screening criteria that can be used for identifying units with emissions less than one pound per day. The proposed amendment lists a screening criteria of 16 hours a day of burner operation (Table 3 in proposed amended Rule 1147) for units rated 325,000 to 400,000 Btu per hour. The burner is not likely to be on 100% of the time an oven is operating so the oven can operate 24 hours a day while the burners is on for less than 16 hours per day. Depending upon the process, temperature, and operating cycle of the burner, units larger than 400,000 Btu per hour are also able to operate 24 hours per day without exceeding one pound per day of NO<sub>x</sub> emissions. In addition, the proposed amendment provides options to use monthly averaging and fuel usage. The SCAQMD has proposed incentive programs in the 2016 Air Quality Management Plan. In addition, adoption of Proposed Rule 1111.1 for commercial space heating furnaces will make available heating units of this size that will meet the Rule 1147 NO<sub>x</sub> limit.

**Comment:** One cannot use a low NO<sub>x</sub> burner for processes that operate at 300 °F and lower unless you also install a higher cost burner control system. Because of this limitation, electric ovens are used. Emissions also increase at the low operating range of low NO<sub>x</sub> burners.

**Response:** Because the cost effectiveness for retrofitting small units can be higher than the cost effectiveness criteria used for minor source BACT, the proposed amendment provides these units time to reach the end of their useful life before the unit is replaced (30 years). The cost effectiveness for new units is much lower. Specific categories of new units including fryers, spray booths, and afterburners and incinerators did not have to comply with emission limit as new units starting in 2010, have later compliance dates but would have to comply with emission limits when they are 30 years old.

The proposed amendment would also allow small ovens to use burners rated 325,000 Btu per hour without having to meet the 30 ppm emission limit. Electric ovens are a viable alternative for many processes. Another option is infrared burners that are used in many applications and do not require emissions testing under the proposed amendment. With the possible exception of infrared burners, the operating characteristics of both rule compliant and non-compliant burners are similar and is the reason the rule requires emission testing across the range of oven operation.

### **Comments Received in Writing after Release of the Draft Rule and Staff Report**

**Comment Letter #3:** This comment letter repeats the comments from Letter #1 received previously. Request the SCAQMD amend Rule 1147 as proposed in the preliminary draft rule to allow existing small incinerators and crematories with emission less than one pound per day NO<sub>x</sub> to continue to operate without having to demonstrate that they meet the rule emission limit. Alternatively have a different (higher) emission limit for units fired on propane.

**Response:** Please refer to response for Comment #1.

**Comment #4:** A comment letter was received from FDI, Inc. that focused on the Draft Subsequent Environmental Assessment (DSEA) for PAR 1147. The letter is comment letter #1 for the DSEA but comment letter #4 for this staff report. Comments in the letter relative to the proposed rule are summarized and a response is provided below:

**Comment #4-1:** FDI presents the following: the emission factors listed in Table 3-1 on page 3-2 of the DSEA is flawed; the emission factors in the table and the default emission factor that SCAQMD uses overstates the baseline emissions inventory and rule emission reductions; staff should provide details on the equipment, operating temperatures, and testing of those units that resulted in the baseline emissions in the table:

- There is no record of most of this inventory in the SCAQMD annual emission reporting system;
- Auto repair spray booths have low emissions and provides estimates of emissions with calculations. An attachment includes a table of other equipment and estimates of their emissions. FDI further states that Potential to Emit (PTE) should not be used in SCAQMD analyses;
- Within the DSEA there are a significant number of devices with emissions greater than 1 pound per day and that this incorrect. FDI references an attached table of emission estimates for different types of equipment; and
- The SCAQMD should use annual emission reporting system data to generate the emission inventory and estimate emission reductions.

**Response:** The baseline emissions shown in Table 3-1 of the DSEA are not based on the emission factors listed in the table. Table 3-1 originates from the Environmental Assessment (EA) for Rule 1147 adoption in 2008. Because the current CEQA analysis is a Subsequent Environmental Assessment, information from the EA for rule adoption in 2008, including Table 3-1, is necessary to complete the analysis. The total emissions presented in the table for is from the 2007 Air Quality Management Plan and are based on

information generated by local gas utilities which are then provided to the California Public Utilities Commission and Energy Commission. This information is then provided to the California Air Resources Board (ARB) who, along with SCAQMD inventory data, uses this information to prepare an emission inventory. The emission inventory is then provided to the SCAQMD. The emission factors listed in Table 3-1 are from U.S. EPA and presented in the table only to illustrate the range of emissions from these type of equipment. The emission estimates for the different categories are prorated based on the estimate of the number of equipment in each category. This information was previously communicated to FDI and other stakeholders during rule development for the 2008 rule adoption and the 2011 rule amendment.

FDI states that there are only a few units with emission greater than one pound per day. SCAQMD staff agree that most equipment affected by the rule have emissions less than one pound per day. This staff report indicates that at least 75% of affected units have emissions less than one pound per day and that number could be as high as 90%. However, as a group, these units generate a significant amount of emissions. Consequently, emission reductions are needed to achieve compliance with the ambient air quality standards for ozone and NOx.

While it is true there are other sources information of emissions including the SCAQMD annual emission reporting, it is not always possible to use these other sources. As noted by the commenter, few businesses are required to report under the annual emissions reporting program. In addition, most of the information collected is aggregated and it is not possible to identify individual equipment fuel use and emissions. The analysis for any rule development project estimates average and range of emissions based on appropriate emission factors that represent average emissions from different categories of equipment as well as estimates of hours of operation and usage. Some equipment will have lower emissions but other equipment will have above average emissions. The proposed amended rule staff report and Subsequent Environmental Assessment do not use Potential to Emit (PTE) to estimate emissions. However, this information can be adjusted to estimate actual emissions and is available for many equipment.

It is not possible for AQMD staff to evaluate the table of emissions estimates provided as an attachment to this letter. The fuel usage, emission factors or emission test results, and PTE as calculated for the SCAQMD permit are not provided. In addition, the weekly, daily, and hourly operation schedules are not provided. Daily emission estimates from annual data can vary significantly depending upon the actual operating schedule and other factors. For example, dividing annual emissions by 365 days per year when a unit operates 250 days per year or less will significantly underestimate daily emissions. Staff has estimated that a typical spray automobile repair spray booth has emission less than 0.3 pounds per day for an average one shift per day operation. However, some units process many more cars per day in one shift than others and some units are used for more than one shift per day. Emissions also vary depending upon the type of booth. In addition,

new booths are more efficient, but there are many older booths in the SCAQMD which will have higher emissions.

The estimate of emission reductions forgone for the proposed rule amendment is 0.6 to 0.9 tons per day of NO<sub>x</sub> which will be made up over time as new units replace old units. For the CEQA impact analysis, it is necessary to estimate worst case impacts where there is uncertainty regarding the impact of project and alternatives.

**Comment #4-2:** FDI states that Rule 1147 does not decrease PM<sub>2.5</sub> emissions and Low NO<sub>x</sub> burners do not emit less PM<sub>2.5</sub>

**Response:** PM<sub>2.5</sub> is both directly emitted and chemically produced from its precursors which are nitrogen oxides, sulfuric oxides and volatile organic compounds. Research in atmospheric chemistry and EPA guidelines clearly define that NO<sub>x</sub> is a PM<sub>2.5</sub> precursor. PM<sub>2.5</sub> monitoring and modeling is required to be chemical specific (EPA, 2014) for demonstration of attainment in the AQMP and State Implementation Plan (SIP). The chemical components defined include nitrate, sulfate, organic carbon, elemental carbon, ammonia, crustal components, salt, and others. In the South Coast Air Basin, the majority of ambient PM<sub>2.5</sub> are produced by chemical reactions from NO<sub>x</sub>, SO<sub>x</sub> and reactive organic materials. Reductions in NO<sub>x</sub> emissions from any source result in reductions of PM<sub>2.5</sub> ambient concentrations.

Ref: U.S. EPA, 2014, Draft Modeling Guidance for Demonstrating Attainment of Air Quality Goals for Ozone, PM<sub>2.5</sub>, and Regional Haze.

**Comment #4-3:** FDI recommend CEQA Alternative D because it is consistent with BACT.

**Response:** Staff appreciate the comment.

**Comment #4-4:** The CEQA document does not address cost effectiveness and provides a summary of cost effectiveness estimates made by FDI.

**Response:** Cost effectiveness is addressed in the proposed amended rule Staff Report and socioeconomic analysis. PAR 1147 would be less costly than the existing rule. It should be noted that stakeholders agreed that the Technology Assessment's cost and cost effectiveness analysis for small units (< 1 lb/day) should result in exemptions and compliance delays.

FDI has previously stated that the rule cost-effectiveness is high. These same comments have been responded to in the 2011 rule amendment staff report, the Rule 1147 Technology Assessment and this staff report. Stakeholder input on cost for larger units (> 1 lb/day) was at times consistent with staff's estimates when sufficient detail was provided by the stakeholder. However, comments with examples of cost effectiveness

that were significantly higher could not be verified by SCAQMD staff. In these examples the basis and details of costs provided by stakeholders were not transparent and staff and the independent reviewer of the Rule 1147 Technology Assessment could not complete evaluation of the information provided. Cost effectiveness analyses provided by stakeholders were not always consistent with permitted equipment operating hours, permit requirements, and recommendations from the ABT review of District cost analyses (i.e., a 2014 third party review of SCAQMD cost analyses). In addition, rebates from utilities for rebuilt units were excluded from cost information provided by stakeholders.

**Comment #4-5:** The proposed project and alternatives B, C and D will have less impact than stated in the CEQA document.

**Response:** Please refer to the response to comment #4-1. It should be noted that each of these alternatives result in a different amount of emission reductions forgone. Please refer the discussions of alternatives in the SEA.

**Comment #4-6:** Alternatives B, C, and D will have the same impacts.

**Response:** It should be noted that each of these alternatives result in a different amount of emission reductions forgone. Please refer the discussions of alternatives in the SEA and the response to comment #4-1.

**Comment #4-7:** FDI recommends that a combination of alternatives C and D should be the basis of the rule amendment. FDI also states that the emission reductions foregone are much smaller than staff's estimates and that changes to the RECLAIM program will result in sufficient reductions to offset emissions reductions foregone from amending Rule 1147. Staff should not use PTE to estimate emissions or as the basis to require a unit to comply with emission limits.

**Response:** Alternatives B and C are CEQA alternatives that achieve nearly the same emission reductions over time as the current rule and proposed amendment. Alternative D is not a valid CEQA alternative because it does not achieve the same objective as the proposed project. It is not a delay of emission reductions, the future emission reductions from all less than one pound per day sources would be foregone.

Please refer to the response to comment #4-1 relative to the emission reductions from the rule. As stated previously, Rule 1147 does not require the use of PTE and staff's analysis for this staff report, the Rule 1147 Technology Assessment, and previous rule developments does not use PTE to calculate emissions or emission reductions. The current rule and proposed amended rule provide owners and operators many other options to estimate emissions. However, PTE can be used to identify that at least 75% of units subject to Rule 1147 requirements have emissions less than one pound per day. PTE is a useful screening tool for most businesses affected by this rule.



Both Rule 1147 and the RECLAIM program have emission reduction commitments in the state implementation plan (SIP). These reductions cannot be used to offset one another. Additional reductions would be required beyond what has been committed to in the District AQMP.

**Comment #4-8:** Infrared burners should be exempted from the rule as in Rule 1153.1.

**Response:** Units fired solely with direct fired infrared burners are exempt from the emission testing requirement if certain operating parameters are met. This requirement is consistent with Rule 1153.1.

**Comment #4-9:** Recommendation to change the definition of relocation.

**Response:** The definition of relocation accurately describes this action and is consistent with other SCAQMD rules.

**Comment #4-10:** Units less than one pound per day of emissions should not have to comply if they become 30 years old so remove the age limit in (c)(1). Equipment should not have to comply with an emission limit if it is transferred to a different company at a different location so remove the work relocation.

**Response:** An equipment life of 30 years provides sufficient time for most units to be replaced. If an owner chooses to modify a very old unit to comply with the rule emission limit, the owner has that option. Thirty years is beyond the time an owner would have loan payments for a unit and the time a unit can be depreciated for tax purposes. Compared with new equipment, after 10 years of use, most units require major maintenance in order to continue operation. If an owner chooses to buy used equipment, to install in a facility, then that old unit should meet the same emission limit as a new unit. This principal is consistent with federal, state, and SCAQMD's new source review requirements. In addition, units with emissions of one pound per day or more must comply with BACT upon relocation. The rule must be consistent with SCAQMD Regulation XIII and require those units to comply upon relocating.

**Comment #4-11:** Change description of incineration equipment in Table 1.

**Response:** Staff has changed Table 1 in a way to better address the concern raised in this and similar comments.

**Comment #4-12:** Remove the requirement for equipment to comply at a certain age. The cost to comply with the rule is too high.

**Response:** Please refer to the responses to comments 4-10 and 4-4.

**Comment #4-13:** The requirement to document meter readings should be monthly.

**Response:** Business owners have that option in the current and proposed amended rule, but may also choose to document meter readings daily.

**Comment #4-14 and #4-15:** Remove the requirement for calibrated meters and average monthly emission of 30 days.

**Response:** The proposed rule is written to be consistent with other rule requirements, SCAQMD policy, and standard permit conditions. Please see the response to comment #4-13.

**Comment #4-16, #4-17, #4-18, and #4-19:** Revise the screening Tables in (c)(6) to double the allowable operating hours because no equipment operates at 100% capacity. The hours in Tables 3 and 4 are incorrect and not based on the default emission factor.

**Response:** The screening tables in the rule are one way to document emissions less than one pound per day. Many other options are available. In addition, there are many units that do operate at 100% because the burners turn on at 100% of firing rate and then turn off when the temperature set point is reached. For these units, these tables are the simplest method to document emissions. The hours in Tables 3 and 4 are based on the emission factors referenced by the commenter but are slightly less than the hours from those calculations. The emission factor referenced is an average and some equipment will have higher emissions. The tables include a safety factor so that equipment owners know when they should consider using another more accurate method to document emissions of less than one pound per day.

**Comment #4-20, #4-21 and #4-22:** Comment on dual purpose burner and testing in (d)(7) relative to Table 1 in Rule 1147.

**Response:** The commenter has referenced the incorrect paragraphs in the proposed amended rule. However, consistent with other changes in PAR 1147 for incineration type devices, the proposed amended rule no longer identifies dual purpose burners as a two function device with a different emission limit when performing emission testing. The proposed rule changes address the recommendations in these comments.

**Comment #4-23:** Remove the term repair from (f)(1).

**Response:** This section of the rule identifies documents that must be made available to the SCAQMD in order to determine if a modification is a repair, a change in burner output, or a burner replacement. Rule 1147 requires maintenance records to be kept by the owner at the facility location.

**Comment #4-24:** Remove the age requirement in (f)(4).

**Response:** There is no age requirement referenced in (f)(4). Please refer to the response to comment #4-10 on the age requirement in the proposed rule.

**Comment Letter #5:** This comment supported the comments made in Comment Letter #4 stating that emissions for equipment are much lower than the potential to emit (PTE) calculated for new source review. This letter is comment letter #2 for the Final SEA but comment letter #5 for this staff report.

**Response:** As stated in responses to comments in this staff report, the Rule 1147 Technology Assessment, and the 2008 and 2011 rule staff reports, Rule 1147 does not require use of PTE to comply with rule requirements. In addition, staff analysis does not assume PTE for any calculations in this staff report, previous documents or the current CEQA analysis. The current rule and proposed amended rule provide owners and operators many other options to estimate emissions. However, PTE can be used to identify that at least 75% of units subject to Rule 1147 requirements have emissions less than one pound per day. PTE is a simple effective screening tool for most businesses affected by this rule.

## **REFERENCES**

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## REFERENCES

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SCAQMD, 2007. *Air Quality Management Plan, Final 2007 AQMP Appendix IV-A, District's Stationary and Mobile Source Control Measures*, South Coast Air Quality Management District, June 2007.

SCAQMD, 1996. *1997 Air Quality Management Plan, Appendix IV-A, Stationary and Mobile Source Control Measures*, South Coast Air Quality Management District, November 1996.

## Appendix A –Comment Letters Received

From: Marguerite Johnson [mcj92544@gmail.com]  
 Sent: Wednesday, March 01, 2017 5:32 AM  
 To: Wayne Barcikowski; Sam Wang  
 Subject: Re: Rule 1147 task Force

> On Mar 1, 2017, at 5:31 AM, Marguerite Johnson <mcj92544@gmail.com> wrote:

> Dear Sir,

> My name is Marguerite Johnson and I own and operate Circle of Life Pet Crematorium LLC located in Riverside County. I established COL in 1997 with one crematory unit and have since then added 3 additional units. I currently employ 7 full-time and 2 part time employees and have provided valuable services to thousands of bereaved pet owners and numerous veterinary hospitals and animal shelters throughout Southern California over the last twenty years.

#1 > In 2013 I met several times with AQMD engineer Rod Millican for counsel in how best to address our compliance with Rule 1147. Our situation is unique in that we do not have access to natural gas and operate entirely with propane. Our crematory is located in an agricultural area amongst citrus groves so through extensive investigation I have found bringing natural gas to our location is not a viable option. Mr. Millican also recommended updating / downsizing our cremation burner to a smaller high efficiency version. We replaced our primary cremation burner with a new 500,000 BTU Eclipse TJ0050 and updated our permit. We have been diligently working with the cremation unit manufacturer, burner manufacturers, and Total Air Quality for emissions testing and despite spending close to 30,000 dollars on updating equipment, testing and fees, to date we have not been able to reach the target of 60 ppm. I am not an engineer but have reached out to many resources regarding our situation and have been universally advised propane burns more efficiently than natural gas but with higher emissions. Even the daunting financial investment of purchasing new crematory units does not guarantee us compliance with current Rule 1147. Therefore I am looking for a realistic path to keep my business in operation and comply with AQMD requirements. Currently I have an extension allowing us to operate under the condition of limiting our propane usage to 78 gallons per day per unit. According to calculations by Total Air Analysis utilizing 78 gallons of propane / day limits our emissions to one pound per day. We have gas meters and maintain records for verification.

> I am requesting the task force to allow us to continue operating under this current 78 gallon propane / day restriction as a permanent resolution for compliance to Rule 1147. Or alternately raise the current NOx emission limit of 50 ppm (as specified for natural gas burners) to something realistically achievable for burners operating on propane. I strive to operate in an environmentally responsible manner and completely support the mission of preserving the clean quality of air in our beautiful Southern California but I am desperately looking for a resolution that will allow me to remain in compliance with AQMD rules that ensures the long term viability of my business. The livelihood of my family, my employees and their families depend upon it. I appreciate the opportunity to submit input on this rule and look forward to your feedback and direction.

>  
 > Respectfully yours,

>  
 > Marguerite Johnson  
 > Circle of Life Pet Crematorium LLC  
 > 43800 Whittier Ave  
 > Hemet CA 92544  
 >  
 > 951-536-1634 cell  
 > 951-927-8170 office

March 3, 2017



**Via Electronic Mail Only**  
(wbarcikowski@aqmd.gov)

Mr. Wayne Barcikowski  
Air Quality Specialist  
South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765

**Subject: Volcanic Red, LLC Comment Letter to Proposed Amended Rule (PAR) 1147**

Dear Mr. Barcikowski:

On behalf of VOLCANIC RED, LLC DBA VOLCANIC RED COFFEES ("Volcanic Red"), ENVILEARN, LLC DBA ENVERA CONSULTING ("Envera Consulting"), appreciates the opportunity to submit the following comments related to the proposed amended rule (PAR) 1147 presented at the Public Workshop on February 15, 2017. Volcanic Red is a specialty coffee roaster located in Los Angeles.

Volcanic Red supports the proposed amendments in Rule 1147 that will exempt food ovens (coffee roasters) from Rule 1147 and thereby regulating them under Rule 1153.1. During this time, we understand that coffee roasters will only need to meet the requirements of best available control technology (BACT), if the need is triggered during the permitting process.

#2 While PAR 1147 does solve some of the challenges related to coffee roasters and the current Rule 1147, it does however, create an unknown for the future. Specifically, without seeing any proposal for Rule 1153.1, it does make it difficult to make capital decisions on equipment and upgrades since the future requirements for new, modified and/or relocated coffee roasters remain unknown at this time. In addition, it is unclear if the current emission limits of Rule 1153.1 will remain unchanged since coffee roasters exhibit a structure/configuration and emission relationship that is currently not being addressed by the AQMD (e.g., emissions from direct-fired coffee roasters vs. other configurations and burner types).

Again, we support proposed amendments in Rule 1147 as it relates to food ovens and look forward to working with you and the AQMD's Staff on the development of language for Rule 1153.1. Thank you for the opportunity to submit these comments. If you have questions regarding these comments, please feel free to contact me at +1 415 203 0520.

Sincerely,

A handwritten signature in black ink, appearing to read "Grant T. Aguinaldo", written over a horizontal line.

Grant T. Aguinaldo  
of ENVERA CONSULTING

cc: Gare Clark, Volcanic Red, LLC  
Mike Ehler, Volcanic Red, LLC

Envera Consulting | 1107 Fair Oaks Avenue, Suite 295 | South Pasadena, CA 91030  
enveraconsulting.com



**Wayne Barcikowski**

---

**From:** Marguerite Johnson <mcj92544@gmail.com>  
**Sent:** Tuesday, April 25, 2017 9:46 AM  
**To:** Wayne Barcikowski  
**Subject:** Rule #1147

Dear Mr Barcikowski,

I have previously emailed you and Mr Wang on March 1 regarding my situation and Rule 1147 but have not had any feed back so I am resubmitting

my information. I own and operate Circle of Life Pet Crematorium LLC in Hemet CA. We have been in operation since 1997, originally with one unit but over the years have added 3 additional units. I currently employ 6 full time and 2 part time people and provide services to pet owners and veterinary hospitals in Riverside, San Bernardino and San Diego Counties. Our situation is unique in that we are located in a agricultural area (citrus grove) of Riverside County and do not have access to natural gas. We operate strictly with propane and according to my research propane generally burns hotter but with increased emissions. We met several times with AQMD engineer Rod Millican several years ago to address Rule 1147. We followed up with his suggestions of updating/downsizing our cremation burner to a smaller high efficiency version, (500,000 BTU Eclipse TJ0050), investigated bringing natural gas to our location (not an option), and have worked with the manufacturers & Total Air Quality Emissions Testing in regards to 1147 requirements. This has become an expensive endeavor and to date we have not been able to reach the target of 60 ppm.

I am looking for a realistic path to keep my business in operation. Currently I am operating on an extension under the condition of limiting our propane usage to 78 gallons/ day per unit. According to Total Air Analysis utilizing 78 gallons propane / day limits our emissions to 1 pound per day.

I am requesting the task force to consider raising the Nox emission limit of 60 ppm (as specified for natural gas burners) to something more achievable for burners operating on propane and/or allowing us to continue to operate under the daily limit of 78 gallons / day as permanent solution.

I am searching for a solution that will allow me to remain in compliance with AQMD rules there by ensure long term viability of my business for me and my employees.

Thank you for your consideration in this matter. I plan to attend the June 2 hearing on this rule.

Marguerite Johnson  
Circle of Life Pet Crematorium LLC  
951-536-1634

The following is Comment Letter #4 for this Staff Report and Comment Letter #1 For CEQA



**FURNACE DYNAMICS, INC.**

261 Euclid Ave.  
Long Beach, CA 90803  
562-433-3025

May 9, 2017

Ms. Barbara Radlein  
Program Supervisor, CEQA Special Projects  
South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765-4178

Dear Ms. Radlein,

We have reviewed the PAR 1147 CEQA document presented March 23, 2017 and have provided our comments below for your consideration. I hope these comments will be helpful in finalizing your final Environmental Assessment.

**Page 3-2 Table 3-1: "Typical Uncontrolled NOx Emissions"**

The emission values are in most cases extremely flawed. We have seen no evidence that any of the values in the chart are accurate and directly applicable to Rule 1147 devices.

Since the mid-1990s we have pre-tested well over 500 devices of all types of equipment including a significant number of RECLAIM sources. This also included approximately 200 parallel testing of these same devices with source test companies. The chart states the "Metal Heat Treating" and "Metal Melting Furnace" categories have uncontrolled emissions from 150-210 ppm. This is only applicable to furnaces with recuperated air systems that preheats the combustion air typically from 600°F – 1200°F with the net effect of increasing flame temperature and thus NOx emissions. We know of only one preheated air system that fits this profile in the Rule 1147 realm. That furnace was used to reclaim sand which showed a pretest value of about 156 ppm. This facility is no longer in 1147. We feel the values of the other classifications on Table 3-1 are also vastly overstated.

In the last 3.5 years, we have conducted over 225 pretests on both high and low temperature devices. The temperature ranges go from ovens that run at 300°F – 800°F and high temperature devices that can operate up to 2200°F. The non-preheated air systems are typically less than 100 ppm for high temp furnaces in the above categories. For low temperature devices such as powder coat ovens and other low temperature devices that operate well less than 1200°F the values are usually significantly less than 100 ppm. The chart states these devices are 120 ppm NOx, which on average, is probably double the actuals.

1-1

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Thus, the concern is the values indicated in the baseline inventory are dramatically overstated for Rule 1147 devices. Therefore, the overall emission reductions are overstated pursuant to rule requirements. This concern has been stated in taskforce meetings. If staff has evidence to support these values stated in Table 3-1, we would like to have them presented to us and the regulated community. That information should include the number of devices tested, what temperatures, how the tests were conducted, by whom and what b-cat categories were included to substantiate the values presented in Table 3-1.

On page 4-6 it states that the emission inventory for PAR 1147 is the inventory used for the 2008 rule adoption. As indicated above, we feel the basis for the inventory is significantly overstated.

The issue regarding the impact of a less stringent rule profile is the accuracy of the 0.9 ton per day declaration. It should be understood that a significant number of small sources are not required to report emissions on the AER program due to the de minimus nature of the emissions profile.

Even at that, with the staff utilizing a default emission factor of 130#/MMcf (101.4 ppm), the actuals are overstated.

We believe, other less than 1#/day devices would also fall into the same category of minimal emissions profile. And, as stated above there is no records of emissions due to the established criteria for inclusion of NOx data in the AERs.

On a study of the auto body industry that included 35 companies and 56 booths, with a total of 844 months of invoices evaluated the average was 0.125 #/day. The maximum input in the group was 1.2 MMBTU/hr and average was 751,516 BTU/hr.

By using this average and using PTE, the daily NOx values would be:

$$751,516 \text{ BTU/hr} / 1050 = 715.73 \text{ cf/hr}$$

$$715.73 \times 24 = 17,177 \text{ cf/day} / 1,000,000 = 0.017 \text{ MMcf} \times 130 = 2.233 \text{ #/day}$$

Thus, by comparing the PTE of 2.233#/day to the actual average of .125#/day, the actual is only 5.6% of PTE.

The document states there are significant number of devices >1#/day. If the analysis conducted, was based on the default emission factor of 101.4 ppm and PTE, many of the devices originally thought to be >1#/day would probably fall well under 1 pound per day.

Please review the summary of multiple types of companies PTE vs. actual gas consumption included in this writeup.

1-1  
cont.

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It is important to note that this information is available, in most cases, from the Districts AER (Annual Emission Report). We should compare the maximum input of each permitted device in the respective plants relative to PTE. In my evaluation *"Percent of PTE – Multiple Facilities"* the study included AERs for many clients. Some of these clients had Rule 219 equipment. I included the 219 equipment in the total maximum input calculations. Many others, emissions are so low that they are not required to report emissions. The values also include permitted and non-permitted equipment and were based on So. California Gas Company invoices.

1-1  
cont.

On page 4-10 ***Relationship Between Short Term Uses and Long Term Productivity***

A statement indicates that NOx is a precursor to ozone and PM2.5. Please refer to *Final PM2.5 Calculation Methodology, October 2006*, Table 3, page 5 which states (for external combustion sources) that 99% of PM10 is actually PM2.5. Therefore, the only way to reduce the amount of PM2.5 is to shutdown equipment or become significantly more efficient. Based on our review of the low NOx technology there are decreases in efficiency, due to the higher use of excess air to reduce the hot mix temperatures and thus lower NOx. There are some increases in efficiency due to improved control. We have seen no substantive evidence that there is an imbalance in loss vs. increase of efficiency in the application of low NOx burners to 1147 devices. Therefore, since the PM10 (PM2.5) is related to gas use not NOx emission profiles, rule 1147 emission reduction requirements' will not have any substantive effect on PM2.5.

1-2

**Evaluation of Alternatives:**

Issues which are of the alternatives represent a balance of emissions reduction and have a major impact on the regulated community.

**Issues of BACT**

1. The current BACT requirements exempt the requirement for installing BACT equipment if the device emits less than 1 pound per day NOx. Thus, the extended compliance on alternative 4 maintains the requirements for BACT when the unit or burner is replaced. As long as the less than a pound per day is maintained; we believe this alternative would be the best solution.

1-3

**Issues of Cost Effectiveness**

1. The other item not discussed but eminently important is the issue of cost effectiveness. We have conducted many cost effectiveness analysis of devices using the Minor Source Cost Effectiveness formula. In the sources that are less than 1 pound per day the cost effectiveness values in many if not most cases far exceed \$100,000/controlled ton of reduction. A number of examples exceed \$1,000,000/ct. As an example, to put this in prospective, large RECLAIM

1-4

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power plant NOx reductions show cost effectiveness values of about \$3,000/ct. Aside from the BACT issue at less than 1 pound per day limitation, the small devices (small companies) have an economic burden that far exceeds the large utilities and refineries. These utilities have millions of customers and thus any costs are spread over these customers – making the incremental cost to them extremely small. Small companies have few customers by comparison and the cost effectiveness is a significant burden on their profitability and ability to stay in business as well as the ability to have their businesses in California.

1-4  
cont.

**Table 5-2**

**Alternative Proposed Project, B, C and D** all have the same forgone emissions of 0.9 tons/day – thus from an emission standpoint there are no differences. However, as we have previously stated the 0.9 t/d value may be overstated, thus the alternatives will have less impacts that the document defines.

1-5

**Alternative B, C and D** all have the same air quality impacts relating to the 0.9 tons per day, however, Alternative D indicates no recovery of emissions in the future. Since the proposed rule requires that if there is a replacement of the burner or device, compliance will be required. Thus, at some time the emissions will be reduced. However, these are mostly related to the <1#/day threshold, therefore, since they are not required to be BACT due to the limited emissions, the recovery is a moot point. As stated in the document, many of these are probably at 0.3#/day. Since the 0.3# value is based on the default emission factor of 101.4 ppm, it could be said, the actual emission reduction from retrofitting would be minimal at best. Bear in mind that if the requirement is 20 years or 25 years, since they are less than 1#/day, they are not and would not be required to retrofit the device.

1-6

**BACT Issues:**

Since **Alternative 4** exempts pressure washers due to the excessive cost and difficulty to retrofit (in some cases over \$200,000) and there are a very limited number of these in the SCAB, the impact of exemption is marginal at best.

**Alternative 4** also requires adequate recordkeeping, this is completely acceptable as an alternative measure. If the 1#/day is exceeded, retrofit is required whenever it occurs.

1-7

Amalgamation of **Alternative C and D** appears to be the best solution with minimal impact to the environment.

**Conclusion:** Since we believe the forgone emissions of 0.9 t/d are significantly above the actual emissions on a wide variety of devices, Alternative C and D offer the best solution, without

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placing a significant economic burden on industry in the future years. An additional consideration, since the RECLAIM program is being phased out, the emission reductions accrued the reinstallation of command and control rules from the large emitters will more than offset the estimated forgone emission from the proposed rule and Alternatives.

1-7  
cont.

It is highly problematic that staff chooses to use PTE to determine the emissions profile of the grouping of 1147 devices. The net effect is to overstate the emissions as a group and thus overstate the forgone emissions – without conducting an in-depth analysis of the actual emissions of these facilities. Additionally, the staff chooses to use the default emission factor of 130#/MMcf natural gas (101.4 ppm) to quantify the emissions profile regardless of type of equipment

**PAR Rule 1147:** The following comments relate to the proposed PAR 1147 rule language. A revised version dated May 2, 2017. We will provide staff with comments relating to those revisions.

1-8

1147(b)(9) Infrared burners since these burners are exempted by 1153.1 (without qualification) they should be exempted from 1147

Page 1 – 1147(b)(4) Recommend the wording be changed to change of location something to the effect that “No modification is required to an existing unit, if the equipment is the same as was permitted and operated at a previous location, provided no modification to the equipment has been made that would change rated input BTU capacity or emissions profile.”

1-9

Page 4 – 1147(c)(1)(A) The word “relocated” should be removed. If a unit is less than 1 pound per day and maintains documentation substantiating the classification – a 30-year limitation should not be applied. The rule does require the permit holder to provide annual maintenance to the equipment.

1-10

**Table 1:**

Add *Multi chambered* to the dual chamber. For example, a heat set lithography press, three heat set presses exhaust all go into an afterburner, therefore the multi chamber definition would apply.

1-11

1147(c)(6) eliminate 35 years – since these less than 1#/day devices are not required to comply with BACT and keep records, they should not have to retrofit in the future. The rule requires annual maintenance records therefore, if properly maintained, they should remain less than 1 pound per day. Also, consider since many of these are well less than 0.5 pounds per day, the future cost would be astronomical in a cost per controlled ton basis.

1-12

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- 1147(c)(6)(C) Read timers once per month. ] 1-13
- 1147(c)(6)(C) change "calibrated" to only the fuel meter not a non-resettable timer. ] 1-14
- 1147(c)(6)(C) Remove the less than 22 pounds per month and reinstate the 30#/month. ] 1-15
- 1147(c)(6)(C) Revise the timer to 50% of maximum input not maximum input. No devices in 1147 operate at 100% capacity. No device operates at PTE since all devices are controlled by a temperature controller with specific set points for a given process. See writeup on PTE and refer to the dialogue on the CEQA document relating to actual vs PTE. ] 1-16
- Table 3 See the included chart relating to the emission factors calculated based on hour considerations for the specific input values. ] 1-17
- Table 4 See chart to correct the hours per month that should be allowed for the specific input values. ] 1-18
- (c)(6)(F) Note the value of 7,692 cf/day is based on the default emission factor of 130#/MMcf or 101.4 ppm. The Table 3 and 4 are not based on 101.4 ppm but higher values. This is inconsistent. ] 1-19
- (d)(7) identifies units with one dual purpose burner that both heats and incinerates VOC, toxics or PM demonstrates compliance with the following. ] 1-20
- (d)(7)(A) If there is only one burner the only place to test is the emission stream exiting the device, thus only one test is required. ] 1-21
- (d)(7)(B) This is no longer valid due to the change in Table 1. ] 1-22
- (f)(1) Remove repair, if a system is repaired to the same configuration as the original burner, no emission changes are present. Also, remove the change of location from the revision. ] 1-23
- (f)(4) Remove the reference to 30 years. If the unit is <1#/day and is maintained per rule requirements, there is no need to replace it in 30 years since it will still be less than one pound per day. ] 1-24

Should you have any questions feel free to call me any time.

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Sincerely,

Anthony W. Endres  
President

Enc.

cc. Dr. Philip Fine  
Mr. Tracy Goss  
Mr. Gary Quinn  
Mr. Wayne Barcikowski

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This page is an attachment and referenced in Comment #1 of this letter.

## Percent of PTE - Multiple Facilities Rule 1147 Companies

Type	Duration Years	Percent of PTE
Medium Forge	1	10.8%
Medium Forge	1	19.6%
Heat Treat	1	16.7%
Powder Coat	6	14.9%
Powder Coat	1	12.0%
Furniture Mfg	2	13.9%
Autobody Study	multiple	5.6%
	<b>Average</b>	<b>13.4%</b>

Notes:

1. The maximum of all devices were added for a total input
2. The input was converted to cubic feet x 24 x 365
3. The gas consumption was based on Gas Co invoices
4. The percentage is based on PTE vs. Actual Consumption
5. Autobody study included 56 booths, 844 months of Gas Co. invoices

This page is an attachment and referenced in Comment #16 of this letter.



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November 19, 2015

**A discussion on Potential to Emit (PTE)**

Potential to Emit is defined as the maximum amount of emissions that can be generated from a device operating at maximum capacity, 100% all of the time, twenty-four hours per day, seven days a week. On an annualized basis that number would be multiplied by 365 days per year. Whereas this is a relatively simplistic approach to determining emissions, it actually is impossible for devices to operate under these conditions. They can only operate under these conditions for relative short intervals when the equipment is first fired. The reason has to do with the fact that all of the devices in Rule 1147 are based on a defined operating temperature. This is true from forging, heat treating, metal melting, powder coating, crematories, cooking ovens, etc.

For example, I have designed combustion systems for over 120 furnaces in forging, heat treating and metal melting. Categorically, no device design is based on PTE. They are based on the objective for the process; the production throughput, operating temperatures, refractory losses, etc. It boils down to the net available heat to do work in the furnace or oven, after combustion losses balanced with the production of a given product.

On direct fired forge furnaces, the typical operating temperature range can be anywhere from 800F to as high as 2250°F and they can be in the same furnace. The theoretical flame temperature under optimal air fuel ratio conditions is between 3000°F and 3100°F. To put this into perspective, carbon steel in a molten state is cast at temperatures around 2900°F to 3050°F. Thus if operated in a typical high temperature furnace you could melt metal. Since the operating temperatures are dramatically less, the firing rate overall is consequently less. Since different alloys require tight control on operating temperatures, the heat input must be precisely maintained to not metallurgical destroy the parts contained in the furnaces. For instance, titanium is finish forged at 1750°F. If the temperature goes to 1825°F, the parts are scrap. It can thus be seen that it is impossible to operate at PTE without destroying parts. This goes for any operating range.

This is true regardless of the process albeit, in the metals industry, powder coating, burn off and a plethora of other processes covered in Rule 1147. They all provide heat input to match a specific set point temperature that are required to maintain the product quality necessary to satisfy customer needs. When looking at powder coating, the low NOx burners provide an operating temperature of between 300°F and 650°F, particular powder materials require tight temperature control. If that temperature is exceeded, the powder will be burnt, rendering the parts unusable. Due to the nature of oven burners and the necessity to achieve 30 ppm, the burners typically operate at higher amounts of excess air than high temperature operations. Even

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so, the actual flame temperatures can reach over 2000°F. Again, the PTE value would be incorrect to apply as a determinate consideration of emissions and thus pound per day emission profiles.

**Actual Annual Use vs. PTE:** To make the determination of actual vs. PTE, we acquired So. Cal Gas Company annual use in therms, converted them to millions of cubic feet, then got to total BTU/hr maximum input of each device in the plant and correlated the actual MMcf to the potential if operated at the maximum input, 24 hours per day on an annual basis. I conducted a study to determine the correlation of PTE to actual usage on two forge plants, one very large and a medium small shop. By the above method, the large forge facility was operating at a 25% of PTE. On the smaller facility there were gas consumption limits on all of their furnaces. The actuals were 19.6% of the permit limits which was well below the devices PTE. This facility was evaluated for actual annual vs. PTE and the results showed 10.82%. I have just completed an evaluation of a couple of powder coating companies. One had an actual annual, compared to PTE of 12%. Another powder coat facility showed a six-year average of 10.49%. during the six years the annual averages ranged from 9.16% to 11.99%. It is important to understand that these facilities were operating under normal production capabilities. Some companies are single shift, others are two shift and one is a three shift operation 5 days per week. I will be conducting additional analysis on a number of other facilities and forwarding those values to staff. However, I would believe the Actual compared to PTE is going to be in the 10% - 25% range.

**Included Charts:** I have included a series of charts that can provide a level of understanding of the relationship of daily emissions vs. BTU input vs. hours of operation at a variety of different average firing rates. The first charts are related to the SCAQMD default emission factor of 130#/MMcf natural gas or 101.4 ppm. The first chart shows the correlation of values assuming 100% of the capacity of the combustion system or PTE. The next three charts show the same correlations of firing rate to hours of operation at 50% of PTE and 20% of PTE. The fourth chart shows how high the BTU rating could be per hour of operation and still stay under 1#/day of NOx. The last three charts show the same data but based on a lower emission value of 60 ppm.

It can be seen the lower emission values reflect a substantially lower pound per day emission value. This is for illustrative value only. However, it should be understood that few devices operate anywhere near the default ppm values. In the last 3 years I have conducted approximately 175 pretests (mostly on 1147 devices) using a Testo 350 combustion analyzer. I have also parallel tested about 70 official source tests and my readings are typically less than 2 ppm deviation from the official source test results. I have yet to see any device that operated near the 101.4 ppm level. The lower temperature devices such as ovens are even lower relative to the default emission factor. Thus even with the values shown on the first 4 charts, the pound per day values are overstated.

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I believe a collaborative effort on behalf of District staff and industry representatives can arrive at a reasonable means of determining what constitutes one pound per day usage. Perhaps the simplest approach could be the use of non-resettable timers on devices, with a limit of X hours per day for a given BTU input. Obviously this would have to be backed up with logs of hours of operation that could be verified by an inspector. If, as was suggested in the 1147 Task Force Meeting, an exemption (or an extended compliance date) be given to devices operating at less than a pound per day, verification is essential. There could be other means of quantification of daily emissions – these need to be discussed in a meaningful way to determine what works for the District and industry.

As always, we appreciate the opportunity to work with staff to assist in developing a bridge of understanding of how industry actually operates. Should you have any questions regarding this subject, please feel free to engage me in a meaningful dialogue to assist in developing rules that relate to real-world conditions.

Sincerely,

Anthony Endres  
President

This page is an attachment and referenced in Comments #17, #18 and #19 of this letter.

## Review of PAR 1147 Table 3 and 4

**Table 3 - Small and Low Use Unit Daily Operating Limits**

### Converting to Actual ppm NOx

BTU/hr	Hours/day	#/day	Actual ppm
325,000 - 400,000	16	0.792	127.97
400,001 - 500,000	14	0.867	117.00
501,000 - 800,000	8	0.792	127.97
800,001 - 1,000,000	6	0.743	136.50
1,000,001 - 1,200,000	5	0.743	136.50

Notes:

1. "#/day" is based on 101.4 ppm (130#/MMcf)
2. "Actual ppm" correlates #/day vs. hours converted back to ppm
3. The highest value was used for actual ppm

**Table 4 - Small and Low Use Unit Monthly Operating Limits**

### Converting to Proper Monthly Hourly Limit

BTU/hr	PAR 1147 Hours/Month	#/month	Hr/mo = 29.96#/mo	#/mo
325,000 - 400,000	352	17.43	605	29.96
400,001 - 500,000	308	19.07	484	29.96
501,000 - 800,000	176	17.43	302	29.96
800,001 - 1,000,000	132	16.34	242	29.96
1,000,001 - 1,200,000	110	16.34	202	29.96

Notes:

1. Cubic feet per day natural gas = 7,682
2. Hr/mo = 29.96 #/mo is based on 1050 BTU/cf and 130#/MMcf
3. The highest value was used for actual ppm

The following is Comment Letter #5 for this Staff Report and Comment Letter #2 For CEQA

## Comment Letter #2

From: Paul Engel <paulkengel@gmail.com>  
Sent: Thursday, May 11, 2017 12:10 PM  
To: Barbara Radlein  
Cc: Anthony Endres; Gerry Bonetto  
Subject: Proposed Amendment Rule 1147

Barbara

I was in receipt of Mr Endres' comments to CEQA document and proposed Rule 1147. I have been involved with permitting and compliance consulting since 1988. I find that Mr. Endres' comments reflects more correctly actual operations of combustion equipment versus theoretical rated design values. I have worked and continue to work with printers with natural gas-fired dryers for heat-set web-fed printers within AQMD jurisdiction. PTE is an intellectual value with minimal reflection on actual operations. The rated heat input is only experienced for cold start-up to get the oven to operating conditions quickly. If the printers operated at the rated maximum heat inputs, the printed product would be unusable because the printed product would be damaged because of curdled or blistered substrate or in fact would likely cause press fires.

2-1

Thank you for considering the revisions to Rule 1147.

Paul Engel

714-473-8036

## Appendix B – Final Technology Assessment for Rule 1147 Small and Low Emission Sources

# **SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

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## **Final Technology Assessment for Rule 1147 Small and Low Emission Sources**

**February 2017**

**Deputy Executive Officer**

Planning, Rule Development, and Area Sources  
Philip M. Fine, Ph.D.

**Assistant Deputy Executive Officer (Acting)**

Planning, Rule Development, and Area Sources  
Susan Nakamura

**Planning and Rules Manager**

Planning, Rule Development, and Area Sources  
Tracy A. Goss, P.E.

---

Author:

Wayne Barcikowski – Air Quality Specialist

Reviewed by:

Gary Quinn, P.E. – Program Supervisor  
William Wong – Principal Deputy District Counsel



**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
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Cities of Los Angeles County/Eastern Region

SHEILA KUEHL  
Supervisor, Third District  
County of Los Angeles

JOSEPH K. LYOU, PH.D.  
Governor's Appointee

LARRY MCCALLON  
Mayor, Highland  
Cities of San Bernardino County

JUDITH MITCHELL  
Council Member, Rolling Hills Estates  
Cities of Los Angeles County/Western Region

SHAWN NELSON  
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## **EXECUTIVE SUMMARY**

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## EXECUTIVE SUMMARY

### Background

SCAQMD Rule 1147 – NO<sub>x</sub> Reductions from Miscellaneous Sources was adopted in December 2008 and is an important component of the attainment strategy to meet the federal annual PM<sub>2.5</sub> ambient air quality standard as well as meet the ozone standard. The rule regulates NO<sub>x</sub> emissions from combustions sources that were not addressed by SCAQMD rules other than Rule 474 – Fuel Burning Equipment - Oxides of Nitrogen. Rule 474 was last amended in 1981 and limits NO<sub>x</sub> emissions rates from equipment burning gaseous fuels to 125 ppm and equipment burning liquid and solid fuels to 225 ppm (at 3% oxygen). Many categories of equipment used in a wide variety of processes are now regulated by Rule 1147. However, similar equipment can have a wide range of operating characteristics, process temperatures and emissions rates. Because of the number and variety of equipment affected, the rule compliance schedule was phased in over 10 years starting in 2010.

Rule 1147 was amended September 2011 to address compliance challenges, remove a requirement for fuel or time meters, delay compliance dates and provide regulatory relief to affected businesses. Throughout the rule amendment process, discussions with affected businesses, equipment manufacturers, and installers focused on concerns that there were many unique pieces of equipment and on the availability of cost effective and affordable low NO<sub>x</sub> technology. A major concern was the impact of the rule on small and low use equipment with NO<sub>x</sub> emissions of one pound per day or less. To address this challenge, the amended rule provided two solutions: first, sources with daily emissions rates less than or equal to one pound per day were given a delay of up to two years (until 2017 at the earliest) before they were required to comply with emission limits. These small and low emission units originally had compliance dates five years later than larger units. Second, Rule 1147 included a requirement that staff perform a technology assessment for these small and low emission sources that are not typically subject to the best available control technology (BACT) requirement as new sources.

### Technology Assessment

Initially the technology assessment targeted sources where burner technology was either not available or the retrofit cost is comparable to the cost of replacing the unit. Several categories of equipment were identified and removed from Rule 1147 and the requirement for a permit through the May 2013 amendments to SCAQMD Rules 219 and 222. Staff continued its technical evaluation and developed Rule 1153.1 – Emissions of Oxides of Nitrogen from Commercial Food Ovens to move existing in-use food ovens, roasters and smokehouses from regulation by Rule 1147 into their own rule. Rule 1153.1 was adopted in November 2014 and provided more appropriate temperature ranges for defining emission limits, food oven specific emission limits and later compliance dates. In addition, Rule 1153.1 provided a small source exemption for existing in-use units with emissions of up to one pound per day.

The last phase of the technology assessment focuses on the remaining categories of Rule 1147 equipment that were not addressed through the Rule 219, 222 and 1153.1 actions. This assessment utilizes information on affected equipment from the SCAQMD permit system, SCAQMD emissions testing programs and discussions with equipment and burner manufactures, affected businesses, consulting engineers and industry and business representatives. This report provides information on the types and number of equipment affected by Rule 1147, emission characteristics of these equipment and estimates of the cost and cost effectiveness of replacing old burners. Taken together, this information provides insight into compliance and affordability challenges faced by businesses affected by Rule 1147. While the focus of this report is on equipment with NOx emissions of 1 pound per day or less, the report also includes information and analysis applicable to larger units. This information is provided in order to address stakeholder's concerns regarding the availability of technology for larger equipment.

Staff conducted extensive outreach to equipment manufacturers and product installers. Staff went into the field to identify equipment that will comply with Rule 1147 emission limits with available burners and those that may not. Rule development staff has worked closely with industry representatives and other staff to develop solutions to unique compliance challenges. These discussions resulted in a number of proposals to staff that are included in this report.

Ten major categories of equipment were evaluated through the technology assessment including: afterburner technologies, spray booths, crematories, fryers, heated process tanks, metal melting furnaces, heat treating, multi-chamber burn-off ovens and incinerators, ovens and dryers. As a result of this assessment, the following five recommendations are proposed for consideration in future rule development:

- Exempt sources with total rated heat input less than 325,000 Btu per hour from the Rule 1147 NOx emission limit (Alternatively, the emission limit for low temperature systems with these burners could be changed to 60 ppm NOx and the limit for high temperature systems would continue to be 60 ppm)
- Change the NOx emission limit from 30 ppm to 60 ppm NOx for the primary chamber of all multi-chamber burn-off ovens, burn-out furnaces and incinerators for all process temperature
- Delay compliance for existing in-use heated process tanks, evaporators and parts washers from the NOx emission limit until such time the combustion system or tank is modified, replaced or relocated
- Delay compliance with the NOx emission limit for existing in-use spray booths until the heating system is modified or replaced or the unit is relocated
- Delay compliance with the NOx emission limit for existing in-use units with actual NOx emissions of one pound per day or less until the combustion system is modified or replaced or the unit is relocated

Staff estimates that 4,900 to 5,650 out of 6,400 units would be affected by these proposed changes. Staff will continue working with members of the Rule 1147 Task Force and other stakeholders to collect additional information regarding the feasibility and cost of replacing combustion systems in small and low emission equipment subject to Rule 1147.

An RFP was released in February 2016 to solicit proposals for an independent review of the draft technology assessment. ETS, Inc. was selected to review the technology assessment by a panel consisting of individuals from SCAQMD, Ventura County APCD, Furnace Dynamics and California Small Business Alliance. ETS began review of the technology assessment in June 2016 and met with the Rule 1147 Task Force to solicit comments on the draft technology assessment prepared by staff. ETS completed their review of the draft technology assessment and information provided by stakeholders in October 2016. The Rule 1147 Task Force and other stakeholders were presented the results and findings of the ETS review on November 8, 2016.

The ETS review of the draft technology assessment resulted in the following findings:

- On availability of technology to achieve rule emission limits:
  - Low Temperature Processes – Technology is available to achieve 30 ppm NO<sub>x</sub> except for burners rated less than 400,000 Btu/hour
  - High Temperature Processes – Technology is available for all sizes of burners
  - Heated Spray Booths – Technology is available for small and large booths
- ETS agrees with staff to amend rule to address technology concerns:
  - The smallest low NO<sub>x</sub> burners available that achieve 30 ppm for low temperature processes are 400,000 to 500,000 Btu/hour
  - Retrofitting heated process tanks that do not comply with the NO<sub>x</sub> limit requires replacement of the whole system
  - A 30 ppm emission limit for the primary chamber of multi-chamber incinerators, burn-off ovens, burn-out furnaces and incinerators is not possible with the preferred burners
- ETS additional recommendation:
  - Recommend to change NO<sub>x</sub> emission limit for afterburner processes operating at temperatures less than 800° F from 30 to 60 ppm (SCAQMD staff is also considering to change the emission limit for related types of process that do not have integrated afterburners)



- On the cost effectiveness method used by SCAQMD staff:
  - ETS agrees with the method used by staff because it is consistent with the EPA method used by other agencies and with the method used for rule development and for other district programs
- Costs used for analysis are representative of costs for equipment and installation of burner systems:
- Agree with staff proposal to amend rule to address the following concerns:
  - Replacing heating systems on existing in-use spray booths may result in a cost effectiveness higher than SCAQMD criteria used in other programs
  - Retrofitting units with daily emissions of less than 1 pound/day may result in a cost effectiveness higher than SCAQMD criteria used in other programs

ETS's review of stakeholder comments found that where sufficient detail was made available, the cost effectiveness of examples provided by stakeholders were consistent with the findings of this technology assessment. However, much of the cost information provided was for larger equipment and not applicable to the small sources that are the subject of this assessment. In addition, for some of the examples provided, there was not sufficient detail to identify the basis of the total project costs provided to ETS. Moreover, the cost provided did not include information on installation of more efficient components and control systems that are eligible for rebates from utilities, that reduce initial project cost, and that reduce utility costs throughout the life of the rebuilt equipment.

## **BACKGROUND**

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## **INTRODUCTION**

The California Health and Safety Code requires the AQMD to adopt an Air Quality Management Plan to meet state and federal ambient air quality standards and adopt rules and regulations that carry out the objectives of the AQMP. The California Health and Safety Code also requires the AQMD to implement all feasible measures to reduce air pollution.

SCAQMD Rule 1147 was adopted December 2008 and because of the number and variety of equipment affected, the rule compliance schedule was phased in over 10 years. The NO<sub>x</sub> reductions from Rule 1147 are a vital component of our attainment strategy and essential for achieving compliance with federal and state ambient air quality standards for PM<sub>2.5</sub>, PM<sub>10</sub> and ozone. Rule 1147 was also amended in September 2011 to address compliance challenges and provide regulatory relief for affected businesses.

## **REGULATORY HISTORY**

Rule 1147 – NO<sub>x</sub> Reductions from Miscellaneous Sources, was adopted by the AQMD Governing Board on December 5, 2008. Rule 1147 incorporates two control measures of the 2007 Air Quality Management Plan (AQMP): NO<sub>x</sub> Reductions from Non-RECLAIM Ovens, Dryers and Furnaces (CMB-01) and Facility Modernization (MCS-01).

Control measure MCS-01 proposed that equipment operators meet best available control technology (BACT) emission limits at the end of a combustion system's useful life. Control measure CMB-01 proposed emission NO<sub>x</sub> limits in the range of 20 ppm to 60 ppm (referenced to 3% oxygen) for ovens, dryers, kilns, furnaces and other miscellaneous combustion equipment. Emission reductions from the equipment addressed by Rule 1147 and control measure CMB-01 of the 2007 AQMP were proposed in prior AQMPs (e.g., control measure 97CMB-092 from the 1997 AQMP).

Rule 1147 was amended September 9, 2011 to delay implementation dates one to two years, remove a requirement for fuel or time meters and provide compliance flexibility for small and large sources. In addition, the rule includes a requirement for a technology assessment for small and low emission sources that are not typically subject to the best available control technology (BACT) requirement as new sources.

## **RULE REQUIREMENTS**

Rule 1147 established nitrogen oxide (NO<sub>x</sub>) emission limits for a wide variety of combustion equipment and affects both new and existing (in-use) combustion equipment. Rule 1147 requires equipment with AQMD permits that are not regulated by other NO<sub>x</sub> rules to meet an emission limit of 30 to 60 parts per million (ppm) of NO<sub>x</sub> depending upon equipment type and process temperature. The compliance schedule for existing equipment is phased in over 10 years starting in 2010. Compliance dates for emission limits are based on the date of equipment manufacture and emission limits are applicable to older equipment first. Owners of existing equipment are provided at least 15 years of use before they must meet rule emission limits. The first group of equipment affected had to comply

with rule emission limits when they were 20 to 30 years old. Owners of small units and units with emissions of one pound per day or less will comply with emission limits later starting in 2017.

Rule 1147 also establishes test methods and provides alternate compliance options including a process for certification of equipment NO<sub>x</sub> emissions through an AQMD approved testing program. Certification eliminates the requirement for end-users to test their equipment. Other rule requirements include equipment maintenance and recordkeeping.

In developing the rule, staff worked extensively with many stakeholders. Staff held Task Force meetings with representatives from affected businesses, manufacturers, trade organizations and other interested parties. Staff also had separate meetings with manufacturers and distributors of equipment and burner systems. In addition, staff met individually with and visited local businesses to observe operations and equipment affected by Rule 1147. Staff committed to continued discussion with industry through the Rule 1147 Task Force and meetings with individual businesses on issues affecting small business including availability of low NO<sub>x</sub> burners for unique applications and specific processes.

The majority of the comments made at the Public Workshop and Task Force meetings for the 2011 amendment supported the proposed delay of compliance dates and limits on the use of meters. However, some consultants commented that the compliance delay was not needed and the AQMD should have made a greater effort to educate businesses affected by Rule 1147. An enhanced outreach program to the regulated community was a high priority for the AQMD.

The comments on the proposed amendments received at the workshop and meetings for the 2011 amendment typically fit into two categories. One set of comments dealt with implementation of the rule and asked for clarification or simplification of rule requirements. In response, staff proposed a number of changes relating to equipment identification, maintenance, recordkeeping, and source testing requirements, which ultimately will result in cost savings compared to the original rule. In addition, the amendment added a mitigation fee option that allows business with equipment emissions greater than one pound per day to delay compliance by three years but will provide emission reductions from other sources during that three year period. Together with AQMD efforts to streamline the permit modification process, the amendment helped businesses comply with rule requirements.

The second category of comments received addressed issues beyond the scope of the 2011 amendment which was crafted to respond to the compliance challenges existing at the time. These comments included proposals for new alternative industry-specific rules, questioning availability of low NO<sub>x</sub> replacement burners, requests for exemption from the rule for small sources, requests to reevaluate rule cost and cost effectiveness and a request to require a cost effectiveness analysis for every piece of equipment subject to the rule. To address many of these issues and as previously stated, the rule amendment committed the

SCAQMD to conduct a technology assessment for smaller sources with emissions of one pound per day or less no later than 18 months prior to the first effective compliance date for these smaller sources (July 1, 2017).

## **AFFECTED INDUSTRIES AND EQUIPMENT**

A wide variety of processes use equipment that is regulated by Rule 1147. These processes include, but are not limited to, food products preparation, printing, textile processing, product coating; and material processing. A large fraction of the equipment subject to Rule 1147 heats air that is then directed to a process chamber and transfers heat to process materials. Other processes heat materials directly such kilns, process tanks and metallurgical furnaces.

Rule 1147 affects manufacturers (NAICS 31-33), distributors and wholesalers (NAICS 42) of combustion equipment, as well as owners and operators of ovens, dryers, furnaces, and other equipment in the District (NAICS 21, 23, 31-33, 42, 44, 45, 48, 49, 51-56, 61, 62, 71, 72, 81, and 92). The units affected by the rule are used in industrial, commercial and institutional settings for a wide variety of processes. Some examples of the processes regulated by the rule include metal casting and forging, coating and curing operations, asphalt manufacturing, baking and printing.

Staff originally estimated approximately 6,600 units subject to the emission limits of Rule 1147 are located at approximately 3,000 facilities. Staff estimated that about 1,600 units at about 800 facilities affected meet the NO<sub>x</sub> emission limits of Rule 1147. This leaves about 2,200 facilities that are expected to require retrofit of burners in their equipment. Staff estimated as many as 2,500 permitted units with NO<sub>x</sub> emission limits greater than one pound per day and an additional 2,500 permitted units with NO<sub>x</sub> emission limits of less than one pound per day will require modification to comply with the emission limits.

Based on an update of the active permitted equipment in the SCAQMD, an estimate of the number of equipment potentially subject to Rule 1147 and the fraction of units in different categories is presented in Figure 1-1. Staff estimates that as many as 6,400 pieces of equipment are potentially subject to Rule 1147 requirements. More than half of the units ( $\approx 3,400$ ) are spray booths and prep-stations. Excluding spray booths and prep-stations, staff estimates that at least one quarter of the units in each category will meet Rule 1147 emission limits without retrofitting burners.

The second largest category of equipment is ovens and dryers with approximately 1,100 units subject to the rule. Staff estimates that at least one-third of the permitted ovens will meet Rule 1147 emission limits based on a sample of the burners used in the ovens. There are also approximately 500 additional ovens and dryers with SCAQMD permits that are not subject to Rule 1147 because they are heated electrically, with infrared lamps, or using a boiler or thermal fluid heater. Electric, infrared lamp, and boiler and thermal fluid heated ovens and dryers are not included in the Figure 1-1.

The third largest group of equipment is air pollution control units that capture and incinerate VOCs, CO, PM and toxics. There are approximately 900 afterburners, degassing

units and remediation units. The remaining categories of equipment have significantly fewer units with high temperature processes (metal melting, heat treating, burn off ovens, kilns and crematories) being the next largest group with approximately 700 units in these five categories. Although these categories have fewer equipment, many units have significantly higher emissions than spray booths and small ovens. Appendix A provides a more detailed summary of the industries and equipment categories affected by Rule 1147.

Figure 1-1



Based on permitted emissions and information provided by manufacturers, vendors and businesses, staff has calculated an emissions inventory of 3.0 to 5.2 tons of NO<sub>x</sub> per day from the equipment regulated by Rule 1147. Spray booths ( $\approx 3,400$  units) contribute about 0.5 to 0.6 tons per day. Other types of equipment with permit limits of one pound per day or less ( $\approx 1,500$  units) have NO<sub>x</sub> emissions totaling about 0.4 tons per day. Equipment with a potential to emit of more than one pound per day ( $\approx 1,500$  units) contribute NO<sub>x</sub> emissions of 2.1 to 4.2 tons per day. These emission estimates are consistent with the 6.2 tons per day emission estimate developed from the 2007 AQMP for adoption of Rule 1147 in 2008.

Note that the AQMP inventory was based on fuel use and default emission factors. The 2007 AQMP inventory did not take into account lower emissions from units that met BACT emission limits. Using the midpoint of the estimated range from the above calculation for larger sources gives a total inventory estimate for all equipment of about 4.1 tons of NO<sub>x</sub> per day. This estimate is consistent with the AQMP inventory and permit information that at least one quarter of the units have burners that can comply with BACT and Rule 1147 emission limits.

In addition, staff estimates that as many as half of the units (750 out of 1,500) with a potential to emit greater than one pound per day may have actual daily NO<sub>x</sub> emissions less than a pound per day. Many of these units with actual emissions less than one pound per day have BACT and Rule 1147 compliant burners that significantly reduce their emissions. If this estimate is correct, then more than half of units with emissions greater than one pound per day of NO<sub>x</sub> (about 375) have already submitted test protocols and test results. Moreover, because of the Rule 1147 compliance schedule, most of the remaining half of the 750 units with actual emission greater than one pound per day have been permitted since the late 1990s and installed burners that comply with BACT and Rule 1147 NO<sub>x</sub> emission limits.

## **TECHNOLOGY ASSESSMENT**

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## **SOURCES OF INFORMATION**

This report includes information from the technology assessments for Rule 1147 adoption in 2008, the rule amendment in 2011 and new information from the Rule 1147 emission testing program. This information is summarized by equipment category and by rule emission limit. The basis for the technology based emission limits in the rule are in Part D of the SCAQMD BACT Guidelines. In addition, testing performed to demonstrate compliance with SCAQMD permit limits indicated when an emission limit was achieved in practice and was used in the technology assessments for rule adoption and amendment. While the focus of this report is on equipment with NO<sub>x</sub> emissions of 1 pound per day or less, the report also includes information and analysis applicable to larger units. This information is provided in order to address stakeholder's concerns regarding the availability of technology for larger equipment.

The appendices to this report provide detailed information on affected industries, emission testing, cost effectiveness calculations, available technology and emission test results for these equipment categories. Appendix A provides a detailed summary of the equipment categories and businesses affected by Rule 1147. Appendix B of this report includes a summary of the sources of information used for rule adoption and the subsequent 2011 amendment. Appendix C provides a discussion of the SCAQMD emission test program, testing guidelines and a summary of the Rule 1147 emissions test completed. Appendices E through N provide details on the equipment, burners and emission test results for the different categories of equipment subject to Rule 1147.

In addition to information available from SCAQMD programs, this report includes recommendations from equipment and burner manufactures, affected businesses, consulting engineers and industry and business representatives. Staff conducted outreach to equipment manufacturers and product installers. Staff went into the field to identify equipment that will comply with Rule 1147 emission limits with available burners and those that may not. Rule development staff has worked with industry representatives and other staff to develop solutions to compliance challenges. These discussions resulted in a number of proposals to staff that are included in this report.

## **RESULTS OF THE RULE 1147 EMISSION TESTING PROGRAM**

Emission testing is performed to demonstrate compliance with an emission limit. Testing companies do enough calibration, testing and calculation to prove that pollutant concentration or mass emissions are below the applicable limit. Most Rule 1147 emission test results are adjusted by the testing company or SCAQMD staff to address issues with a test's acceptable range or with other testing and calculation issues. While emission tests can demonstrate compliance with an emission limit, many test results cannot be used to accurately estimate concentrations or mass emissions from individual units and categories of equipment. However, the Rule 1147 testing program does demonstrate that burners and their control system comply with the rule emission limits.

Table 2-1 provides a summary of submitted Rule 1147 NOx emission test results that have completed SCAQMD staff review and demonstrated compliance with Rule 1147 emission limits. These test results indicate that equipment subject to Rule 1147 comply with the NOx emission limits. Table 2-1 shows the number of test results and average NOx emission concentrations for units tested at the highest and at a low firing rate if applicable. In most cases the highest firing rate tested is the normal operating condition. However, in a small number of cases the low firing rate is the normal condition. The table also indicates the applicable NOx emission limit for each category of equipment. Table 2-1 does not include results from tests that were subsequently repeated because the original test did not comply with the test method, test protocol or SCAQMD guidelines.

**Table 2-1**  
**Rule 1147 Emission Test Results**

Equipment Category	Rule 1147 NOx Limit (ppm <sup>1</sup> )	Number of Units Tested at Normal/High Fire	Average NOx Concentration at Normal/High Fire (ppm)	Number of Units Tested at Low Fire	Average NOx Concentration at Low Fire (ppm)
Afterburner/ Regenerative Thermal Oxidizer	30 or 60 <sup>2</sup>	13	26	4	13
Afterburner/ Thermal or Catalytic Oxidizer	30 or 60 <sup>2</sup>	9	40	1	41
Afterburner/ Remediation Unit	60	2	23	1	24
Spray Booth (Automobile)	30	10	24		
Spray Booth (Other)	30	13	18	2	22
Crematory	60	20	50		
Dryer/Asphalt	40	1	35		
Fryer	60	7	29		
Fuel Cell Heater	30 or 60 <sup>2</sup>	1	11	1	9
Heated Tank	60	7	37	1	34
Metallizing Spray	30 or 60 <sup>2</sup>	1	22		
Metal Heat Treat	60	23	48		
Metal Melting (Large)	60	8	42	1	58
Metal Melting Pot/Crucible	60	5	54		
Multi-chamber Burn Off Oven or Furnace	30/60 or 60/60 <sup>3</sup>	11	42 <sup>4</sup>		
Multi-chamber Incinerator	30/60 or 60/60 <sup>3</sup>	1	54 <sup>4</sup>		
Oven/Dryer	30 or 60 <sup>2</sup>	112	20	35	21
Print Dryer/Oven	30	19	20	4	23
Textile Shrink Dryer	30	2	24		
Textile Tenter Dryer	30	4	23	4	26
Unit Heater	30 or 60 <sup>2</sup>	3	20	1	13
<b>Number of Units</b>		<b>272</b>		<b>55</b>	

<sup>1</sup> The Rule 1147 NOx limit is based on a reference level of 3% oxygen (O<sub>2</sub>) in the exhaust. All emission test results are converted to a concentration in parts per million at the reference level of 3% O<sub>2</sub>.

<sup>2</sup> The emission limit depends upon the process temperature.

<sup>3</sup> The emission limit for the primary chamber varies depending upon process temperature.

<sup>4</sup> Average NOx emissions measured after the secondary chamber (afterburner).

## **BURNER AVAILABILITY AND FEASIBILITY TO RETROFIT UNITS**

While the Rule 1147 emissions testing program indicates that the rule limits are achievable for all categories of equipment with current available technology, there is one situation where low NO<sub>x</sub> burners are not available. There is also one type of process for which staff recommends changing an emission limit based on the type of burners used in that process. In addition, there are several related categories of equipment where it is not feasible to retrofit an existing unit.

### **Burners for Small Ovens and Dryers**

Low NO<sub>x</sub> burners are not available for very small low temperature ovens or dryers. The smallest burners produced are between 0.4 and 0.5 mmBtu per hour. If an oven requires a burner to consistently operate below about 0.3 mmBtu per hour, low NO<sub>x</sub> burners are not available to meet the 30 ppm NO<sub>x</sub> emission limit. There are smaller low NO<sub>x</sub> burners for high temperature applications that must meet an emission limit of 60 ppm. However, these applications typically require multiple burners and the total heat input exceeds 0.4 mmBtu per hour. Based on these findings, staff is considering exempting units with heat inputs less than 325,000 Btu per hour from the rule emission limit. Alternatively, the emission limit for these small oven/dryer burners could be changed to 60 ppm NO<sub>x</sub>.

### **Emission Limit for Burn off Ovens and Furnaces**

The second category of equipment that may have difficulty meeting an emission limit of 30 ppm in low temperature applications is burn off ovens, furnaces and incinerators. Burn off ovens and furnaces melt and incinerate coatings and other materials on a product that is being recycled. This occurs in a chamber where the process temperature may be above or below 800 °F. For processes below 800 °F the NO<sub>x</sub> emission limit is 30 ppm. The incinerated materials go to a second chamber or incinerator that operates above 800 °F and has a NO<sub>x</sub> emission limit of 60 ppm.

However, the preferred type of burner for the primary incineration chamber is the same type of burner used in high temperature applications such as afterburners. These are also the same types of burners used in kilns, direct fired furnaces and crematories. These burners have been designed to comply with emission limits in the 50 to 60 ppm range. After discussions of this issue with equipment and burner manufacturers, staff is considering changing the emission limit for the primary chamber of burn off ovens, furnaces and incinerators to 60 ppm. SCAQMD staff is also considering to change the emission limit for related types of process that do not have integrated afterburners.

### **Heated Process Tanks, Evaporators and Parts Washers**

The Rule 1147 testing program has identified three types of heating systems used in process tanks, evaporators and some parts washers that comply with the NO<sub>x</sub> emission limit. There is no information yet available for the fourth type of heating system. For all four of these systems, the burners and heat exchangers or tubes are designed as one integrated system. If an individual heated tank or evaporator system using any of systems does not comply with the emission limit, then the whole tank will have to be replaced. Exempting existing in-use units from complying the rule emission limit unless the combustion system is

modified would address the issue that it is not feasible to retrofit an existing heated tank with different burners. If a tank is retrofitted with new burners, the owner will likely replace the heating tubes or heat exchanger. If the owner rebuilds a process tank, then a rule compliant system can be installed at that time.

### **Independent Review of Draft Technology Assessment by ETS, Inc.**

An RFP was released in February 2016 to solicit proposals for an independent review of the draft technology assessment. ETS, Inc. was selected to review the Draft Technology Assessment by a panel consisting of individuals from SCAQMD, Ventura County APCD, Furnace Dynamics and the California Small Business Alliance. ETS began review of the technology assessment in June 2016 and met with the Rule 1147 Task Force to solicit comments on the draft technology assessment prepared by staff. ETS completed their review of the draft technology assessment and information provided by stakeholders in October 2016. The Rule 1147 Task Force and other stakeholders were presented the results and findings of the ETS review on November 8, 2016.

The detailed ETS review of the draft technology assessment is included in Appendix O of this report. The ETS review resulted in the following findings:

- On availability of technology to achieve rule emission limits:
  - Low Temperature Processes – Technology is available to achieve 30 ppm NO<sub>x</sub> except for burners rated less than 400,000 Btu/hour
  - High Temperature Processes – Technology is available for all sizes of burners
  - Heated Spray Booths – Technology is available for small and large Booths
- ETS agrees with staff to amend rule to address technology concerns:
  - The smallest low NO<sub>x</sub> burners available that can achieve a 30 ppm NO<sub>x</sub> limit for low temperature processes are 400,000 to 500,000 Btu/hour
  - Retrofitting heated process tanks that do not comply with the NO<sub>x</sub> limit requires replacement of the whole system
  - A 30 ppm emission limit for the primary chamber of multi-chamber incinerators, burn-off ovens, burn-out furnaces and incinerators is not possible with the preferred burners
- ETS additional recommendation:
  - Recommend to change NO<sub>x</sub> emission limit for afterburner processes operating at temperatures less Than 800° F from 30 to 60 ppm

ETS's review of stakeholder comments found that where sufficient detail was made available, the cost effectiveness of examples provided by stakeholders were consistent with the findings of this technology assessment. However, much of the cost information provided was for larger equipment and not applicable to the small sources that are the

subject of this assessment. In addition, for some of the examples provided, there was not sufficient detail to identify the basis of the total project costs provided to ETS. Moreover, the cost provided did not include information on installation of more efficient components and control systems that are eligible for rebates from utilities, that reduce initial project cost, and that reduce utility costs throughout the life of the rebuilt equipment.

## **COST AND COST EFFECTIVENESS**

## REVIEW OF SCAQMD COST EFFECTIVENESS ANALYSIS

There is no single cost or cost effectiveness limit established by the SCAQMD Board for use in rule development, permitting or other programs. Cost effectiveness for CARB and SCAQMD rules and programs differ and depend upon the program, the pollutant, the nature of the process and equipment affected and the types of feasible emission control options. For example, in 1993 a \$15,000 per ton criteria for RECLAIM Trading Credits was adopted by the Board for the SCAQMD emission trading program to trigger additional evaluation and potential rule amendment. Adjusted to 2015 dollars using the Marshall & Swift Equipment Cost Index, that criteria would now be approximately \$25,000 per ton. However, for amendment of the SO<sub>x</sub> RECLAIM program in 2010, the SCAQMD Board approved an amendment with cost effectiveness up to \$60,000 per ton (adjusted to 2015 dollars).

For Rule 1147 adoption, staff estimated average cost effectiveness for replacement of different sizes of burners. Most of the burners evaluated for adoption of Rule 1147 were too large and not used by equipment subject to the rule. Those burners are only used by large equipment subject to the RECLAIM program. Most of the equipment subject to Rule 1147 requirements have heat inputs less than 4 million Btu per hour and burners used in Rule 1147 equipment are less than 2 million Btu per hour. The most common burner size in Rule 1147 equipment is 1 million Btu per hour. In the 2008 staff report, the average cost effectiveness for replacing the smallest burners with the lowest potential NO<sub>x</sub> emission reductions was about \$22,400 per ton (adjusted to 2015 dollars).

For new source review under SCAQMD Regulation XIII, cost effectiveness can be included in the determination of what is best available control technology (BACT) for emission control for non-major sources. For BACT decisions affecting new sources at major facilities, cost or cost effectiveness is not included in the evaluation. However, BACT determinations for non-major (minor) sources are established by two approaches. One path evaluates technology and cost effectiveness as part of a public process to establish minor source BACT. The public process includes workshops and stakeholder input. The cost effectiveness for those decisions varies depending upon the pollutant, process and equipment involved. Note that there is one important difference in the calculation of cost effectiveness between traditional BACT analysis and rule development. For rule development, a best estimate of equipment's useful life is used in the calculation of cost effectiveness instead of a fixed 10 year assumption that is associated with financing of new equipment.

Historically, the second path used to establish minor source BACT was demonstration by a permitted unit at a non-major facility that an emission limit was "achieved in practice." If an emission limit was achieved in practice at a non-major facility, that emission limit became minor source BACT and was required by SCAQMD for applications for subsequent SCAQMD permits for similar new units regardless of the cost and cost effectiveness.

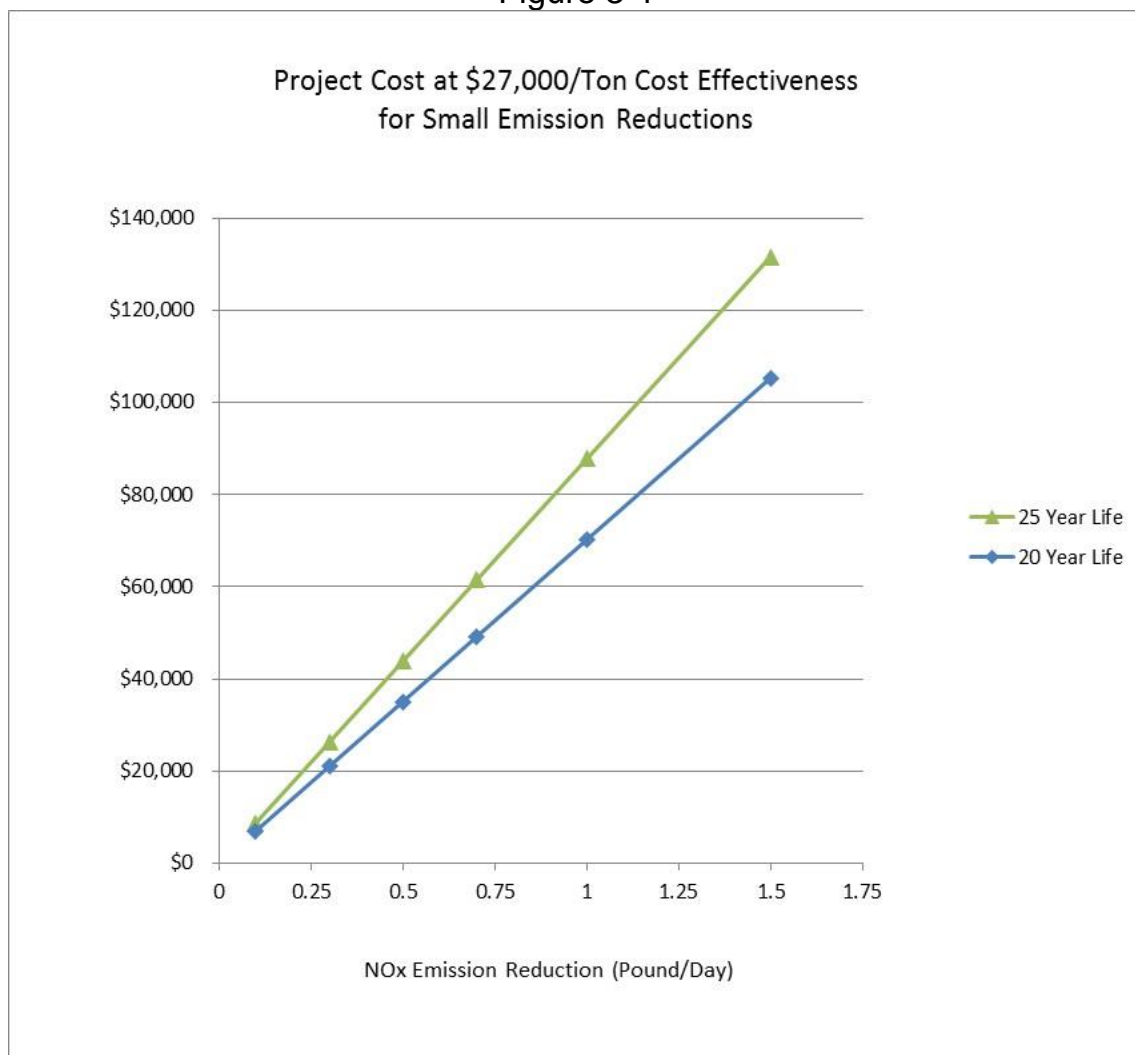
The SCAQMD has also established maximum cost effectiveness criteria in the SCAQMD BACT guidelines for sources for which there is no defined minor source BACT (Appendix

D). These cost effectiveness criteria is adjusted every calendar quarter by the Marshall & Swift Equipment Cost Index to account for changes in equipment cost. The cost effectiveness criteria for processes that do not have an established BACT is currently about \$27,000 per ton of NO<sub>x</sub> for average cost effectiveness and about \$81,000 per ton of NO<sub>x</sub> for the incremental cost effectiveness between two or more control options. The incremental cost effectiveness for Rule 1147 equipment is the difference in cost and emissions between an old natural gas burner (BACT prior to 1998) and a low NO<sub>x</sub> gas burner meeting rule emission limits. These minor source BACT criteria are appropriate for the analysis of cost effectiveness for small equipment with emissions of one pound per day or less.

### SCAQMD BACT COST EFFECTIVENESS CRITERIA

The cost to retrofit equipment and the NO<sub>x</sub> emission reductions for the project can be illustrated for different cost effectiveness criteria with a graph. Figure 3-1 shows an example using small emission reductions of approximately a pound per day and project cost that results in a cost effectiveness of \$27,000/ton of NO<sub>x</sub> reduced. The cost is shown for projects with equipment lifetimes of 20 and 25 years.

Figure 3-1





For emission reductions of 0.25, 0.5 and 1 pound per day, project costs of \$20,000, \$40,000 and \$80,000 have cost effectiveness of \$27,000 per ton. Emission reductions of 0.25 to 1 pound per day bound the range of emission reductions achievable from small and low emission equipment that are the subject of this technology assessment. This equipment has NO<sub>x</sub> emissions of one pound per day or less, are exempt from the BACT requirement under new source review and have more time to comply with Rule 1147 emission limits.

### **DISCOUNTED CASH FLOW ANALYSIS**

For calculating cost and cost effectiveness, SCAQMD BACT guidelines (Appendix D) and rule development use a discounted cash flow (DCF) analysis to estimate the cost and cost effectiveness of emission control options. The DCF method is used to calculate a net present value (NPV) of current and future expenses and savings (cash flows) from installing emission control equipment. When determining the cost and cost effectiveness of a control option, the current costs associated with the purchase and installation of equipment are added to the net current value of future costs and savings associated with operating the new equipment. In a situation where one emission control system is replacing another, the future cost and savings incorporated into the analysis are those above and beyond the cost of maintaining and operating the current equipment.

To calculate the cost effectiveness of an emission control system, the purchase, installation and operating cost of new equipment (the NPV) is divided by the emission reduction benefit of the new equipment over the operating life of the equipment. The operating life of equipment can vary from about 10 years for a residential tank type water heater to 25 or more years for residential heating furnaces, boilers, ovens, furnaces, kilns and afterburners. There is a significant number of permitted equipment including ovens, kilns, furnaces and afterburners systems operating in the SCAQMD that are 20 to 50 years old.

### **LEVELIZED CASH FLOW ANALYSIS**

In response to recommendations from a SCAQMD sponsored review of its socioeconomic analysis conducted by Abt Associates and stakeholder comments, all current and future rule analyses will include both the DCF and levelized cash flow (LCF) estimates of costs and cost effectiveness. The cost-effectiveness values based on DCF and LCF methods are not directly comparable to each other: DCF discounts all future operation and maintenance costs to their present values whereas LCF amortizes the initial capital and installation costs over the equipment lifetime. This is why DCF values are always lower than LCF values for the exact same amount of estimated compliance cost.

### **EXCLUDED COSTS**

Because the useful life of boilers, ovens and furnaces can be several decades, the cost of routine maintenance and equipment replacement unrelated to control equipment is not included in the cost effectiveness analysis of regulatory requirements to meet emission standards. For example, a boiler's heat exchange tubes may be replaced several times over the boiler's life. Burners and combustion control systems in boilers and other equipment must be maintained and are routinely repaired or replaced. In addition, heat treating furnaces have refractory and door seals replaced several times over the furnace's lifetime. Indirect fired heat treating furnaces also require replacement of heating tubes and may require replacement of heat shields and recirculation fans as the furnace ages. Furnace

refractory, seals, tubes and heat shields may be replaced two to three times over a twenty year period. These routine maintenance and repair expenses are independent of the cost of upgrading equipment to meet emission standards.

Costs for demonstrating compliance with SCAQMD rules and regulations are excluded from cost effectiveness analyses for emission control equipment. SCAQMD BACT Guidelines, permit processing policy, and rule development process do not include the cost of demonstrating rule compliance such as source testing in the calculation of emission control equipment cost effectiveness. However, compliance demonstration costs including emissions testing, recordkeeping and other costs beyond what is recommended by equipment manufacturers are included in the socioeconomic assessment for rule adoptions.

Compliance demonstration costs are not included in a cost effectiveness analysis of new pollution control systems because all units regulated by a rule are subject to the same compliance costs. All units required to meet the Rule 1147 NO<sub>x</sub> emission limit must be tested and the owner/operator must keep maintenance and test records. A rule compliant unit that does not replace its heating system has the same compliance costs as a unit that does replace burners and other components. Moreover, costs due to compliance with other SCAQMD rules such as Regulation XIII (new source review), including BACT and emission offsets, should not be included in the calculation of cost effectiveness for emission control equipment installed to comply with Rule 1147 emission limits.

### **CALCULATION OF COST EFFECTIVENESS PER BURNER**

The calculation of cost and cost effectiveness for Rule 1147 adoption and the 2011 amendment were done on a per burner basis. There are four reasons for this approach. First, combustion systems retrofit to comply with Rule 1147 emission limits use the same system components whether the unit has one or multiple burners. Burners, valves, and control systems will be the same for each burner. The system component that will differ is the combustion air blower (fan). Some units will use packaged burners with an integrated combustion air blower (fan) and others will use an external blower for one or multiple burners. Second, the cost per burner for a burner with its own integrated combustion air blower is higher than for a system with multiple burners and one blower. Third, most small or low emission units have only one burner and tend to use package burners with integrated combustion air blowers. Fourth, the emissions for the whole unit and per burner will be comparable whether one or multiple combustion air blowers are used. For these reasons, the cost effectiveness analysis in this document focuses on the cost and emission reduction per burner replaced utilizing the cost for a burner with an integrated blower.

### **COST AND COST EFFECTIVENESS OF REPLACING BURNER SYSTEMS**

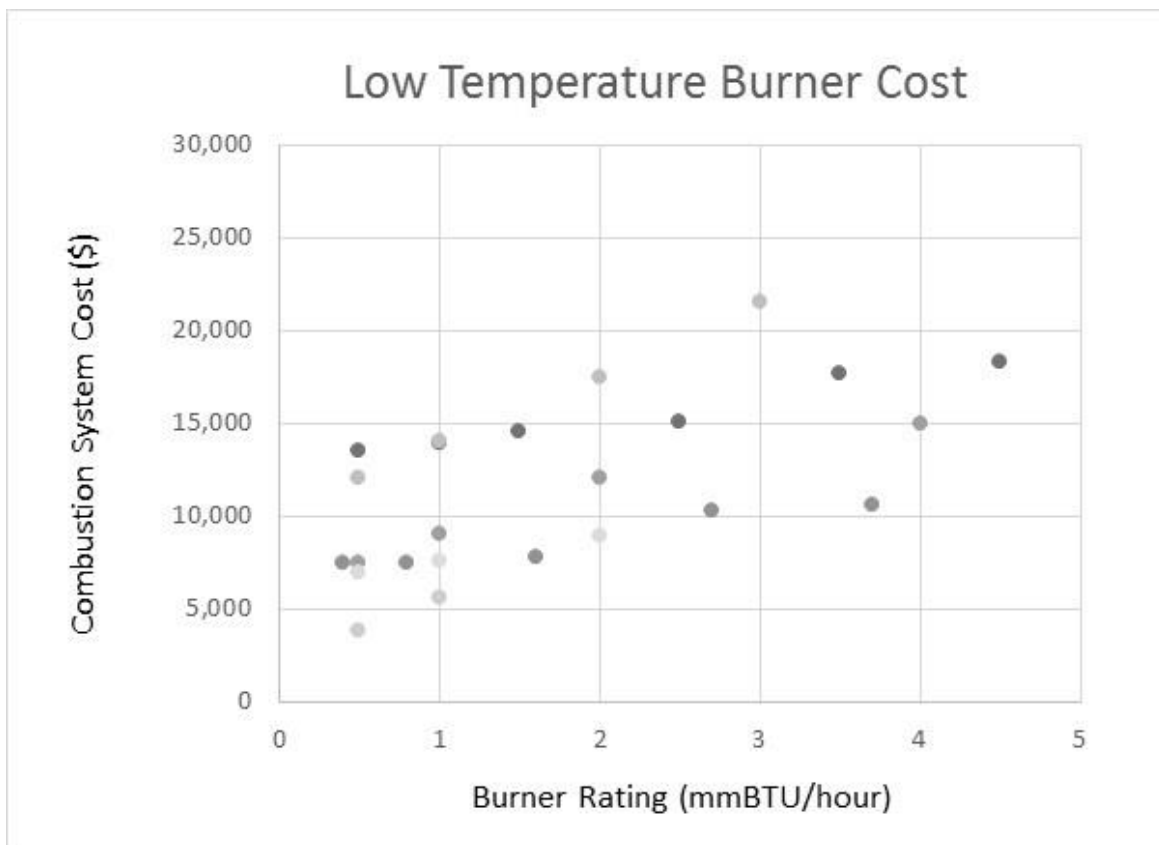
The cost of replacing burners and other combustion system components with the most commonly used low NO<sub>x</sub> burners is shown in Figures 3-2 and 3-3. Burner and combustion system replacement cost for low temperature applications that are required to comply with a 30 ppm NO<sub>x</sub> limit are displayed in Figure 3-2. Figure 3-3 shows replacement cost for high temperature applications that are required to meet a 60 ppm NO<sub>x</sub> limit. These figures include information for the most common burners from the three manufacturers that provide the majority of low NO<sub>x</sub> burners used in Rule 1147 equipment in the SCAQMD.

### Burner Cost and Cost Effectiveness for Low Temperature Ovens and Dryers

Figure 3-2 summarizes information on low NO<sub>x</sub> burners and system components for low temperature operations including ovens and dryers. These costs represent a typical equipment cost to the customer and do not include tax, shipping and installation costs. The information provided is for nozzle mix burners with packaged combustion air blowers including the Eclipse Winnox and HaloFire, the Maxon Cyclomax and Ovenpak-LE and the MidCo low NO<sub>x</sub> burner.

Other types of systems can also be installed in ovens and dryers, but the cost of those alternatives are comparable to the cost of burner systems with packaged combustion air blowers. The cost for a burner with a separate combustion air blower is comparable to the cost of a packaged burner. Separate combustion air blowers are used for larger burners or where multiple burners with one blower providing combustion air to all reduces the cost of the system. Low NO<sub>x</sub> line burners are also available from Eclipse and Maxon but are more commonly used for larger systems than those that are the focus of this report. However, the cost for small line burners are comparable to the cost of the low NO<sub>x</sub> packaged burner systems shown in Figure 3-2.

Figure 3-2



Eclipse and Maxon each have two nozzle mix low NO<sub>x</sub> burner product lines for low temperature applications. Each has one system that was developed about 15 years ago (Cyclomax and Winnox) and a recently developed burner system (HaloFire and Ovenpak-LE). Maxon also has a third low NO<sub>x</sub> burner (the M-Pakt) that uses a different technology

to lower NO<sub>x</sub> that is not included in this Figure but has been installed in a small number of units in the SCAQMD. The M-Pakt burner costs more than the burners included in Figure 3-2 but can achieve significantly lower NO<sub>x</sub> emissions (less than 10 ppm).

Because some replacements do not require the replacement of the fuel supply components and the control system while other retrofits require the replacement of all components, the Maxon Cyclomax and Eclipse Winnox cost in Figure 3-2 only include the cost of the burner with combustion air blower. The Eclipse HaloFire and the Maxon OvenPak-LE cost include the replacement of fuel and control systems. If a retrofit with a Winnox and Cyclomax burner requires replacement of other components including fuel and control systems, the total equipment replacement cost is comparable to the cost of purchasing a HaloFire or OvenPak-LE with all combustion system components. The MidCo low NO<sub>x</sub> burners are only sold with MidCo fuel and control system components and have two costs depending upon options requested. Replacement of a unit's fuel line and control system components depend upon the age of the original equipment and the replacement burner. If fuel line and control system components do not meet current building and safety codes, then they must be replaced with new components that comply with current code requirements.

The majority of the low emission equipment (1 pound/day NO<sub>x</sub>) subject to Rule 1147 have combustion systems rated less than 2 mmBtu/hour. Most use single burners rated less than 2 mmBtu/hour. The cost for installing a burner in the size range of 0.5 to 2 mmBtu/hour is a good estimate of the cost to replace combustion systems in typical low emission units. The cost of packaged burners and combustion systems of this size varies from about \$5,000 to \$15,000 with typical equipment costs ranging from \$7,500 to \$15,000.

However, to calculate total cost of replacing equipment, shipping, tax and installation costs must be added. One approach to estimate installed cost is an established EPA method that uses a multiplying factor to include sales tax and estimate shipping and installation cost. Based on the EPA method and the sales tax rate in southern California, the SCAQMD has used a factor of 1.87 times the cost of equipment to estimate installed cost. In this method, installation costs are assumed to be 50% of the equipment cost and are included in the factor. A contingency can also be included to address uncertainties in the cost estimation. For this analysis an additional 13% is added which results in an installed cost estimating factor of 2.0. Using this factor, an estimated cost for installing a low NO<sub>x</sub> burner in small ovens and dryers is approximately \$30,000 [ $\$15,000 \times 2.0$ ] but can be lower or higher depending upon the components replaced and other factors.

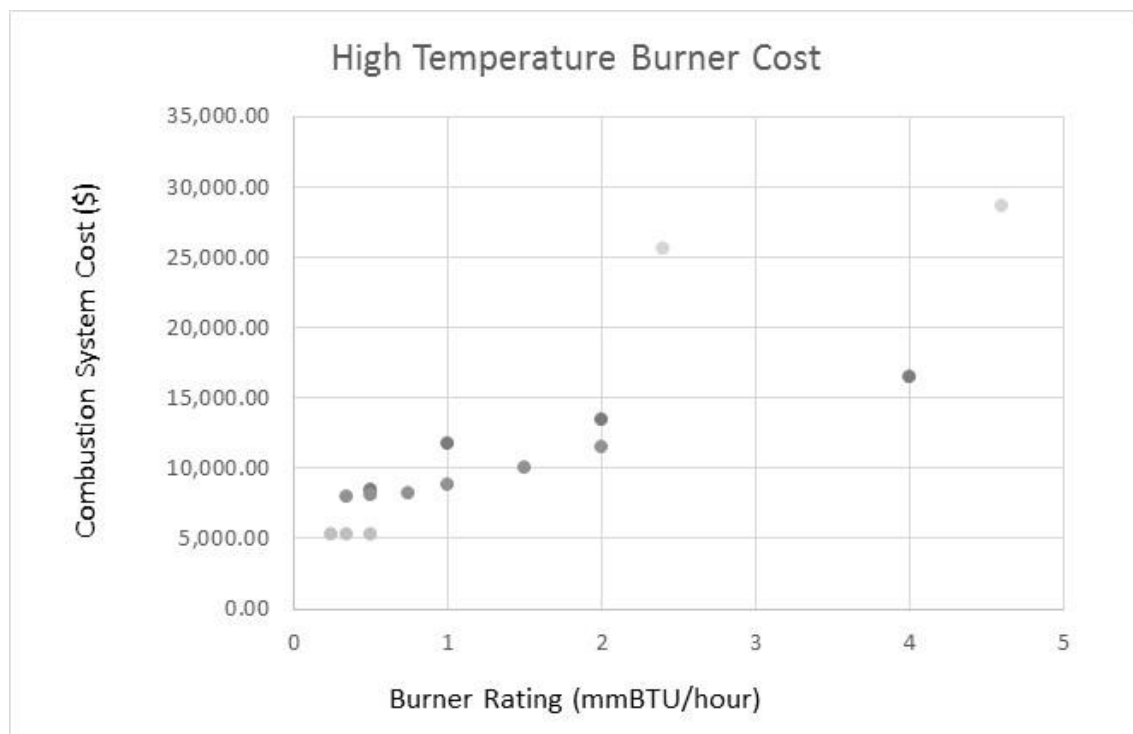
The cost effectiveness of replacing oven and dryer burners in this size range can be estimated using the NO<sub>x</sub> reductions possible from low emission units. Emission reductions of 0.25, 0.5 and 0.75 pounds per day over 260 days per year and 20 years result in a cost effectiveness of \$46,154, \$23,077, and \$15,385 per ton for a project cost of \$30,000. Since most reductions are likely in the range of 0.25 to 0.5 pounds per day, the range is best represented as \$23,000 to \$46,000 per ton of NO<sub>x</sub> reduced with the midpoint of this range at \$34,500 per ton. This cost effectiveness to replace combustion systems for low emission ovens and dryers is greater than the SCAQMD BACT \$27,000 per ton average criteria but less than the \$81,000 per ton incremental criteria for minor source BACT.

In summary, the cost of replacement burners and combustion system components can vary depending upon which components must be replaced. Depending upon the age of the original installation, the burner or the entire combustion system may be replaced. In addition, installation cost can vary depending upon the particular piece of equipment and whether the equipment owner has requested additional work that is not required for compliance with Rule 1147 emission limits. Additional cost will be incurred when upgrading capacity and performing other equipment maintenance. Disregarding other costs the equipment owner may choose to include in a retrofit project, the cost effectiveness for low emission units to comply with the Rule 1147 emission limit may exceed the SCAQMD minor source BACT average criteria for NO<sub>x</sub>.

### Burner Cost and Cost Effectiveness for High Temperature Applications

Figure 3-3 displays burner and combustion system costs for high temperature applications. These costs represent a typical equipment cost to the customer and do not include tax, shipping and installation costs. The three most common burners used in high temperature applications to comply with the Rule 1147 NO<sub>x</sub> emission limit of 60 ppm are the Maxon Kinedizer, the Eclipse Thermjet and Eclipse Tube Firing Burner (TFB). The Kinedizer and Thermjet are used in direct fired heating applications including metal melting, heat treating and in afterburners. The TFB is used for indirect heating applications such as heat treating. Burners from other major manufacturers including Bloom, Facultatieve, and North American/Fives have also been available for more than 15 years and were tested for Rule 1147 compliance. However, these systems were original installed burners and were not retrofits. Staff is not aware of any units that were retrofit with burners from these manufacturers in order to comply with Rule 1147.

Figure 3-3



Pot and crucible furnaces use small nozzle mix burners from a number of manufacturers. Figure 3-3 includes cost for different sizes of the Eclipse Ratio Air burner which has been installed in a small crucible furnace to comply with the Rule 1147 NO<sub>x</sub> emission limit. A Kinedizer burner has also been used to retrofit a small crucible furnace to increase capacity, reduce fuel cost and lower NO<sub>x</sub> emissions.

The cost per burner for high temperature applications is similar to the cost for low temperature applications. However, in larger metal melting and heat treating furnaces, multiple small burners are typically used to provide a more even distribution of heat in the furnace. In situations with multiple burners, the furnace is designed with one combustion air blower for all burners. However, the Eclipse Thermjet, the Ratio Air and the Maxon Kinedizer are also used in many applications requiring one burner. Consequently, the cost shown for the Thermjet, Ratio Air and Kinedizer in Figure 3-3 includes the cost of an individual combustion air blower, new fuel supply components and a new control system. In situations where multiple burners are installed with one combustion air blower and a common control panel, the cost per burner will be less. The cost for each TFB burner is based upon the cost for a system with six burners, new combustion air blower, fuel supply components and control system. The cost of the TFB burner also includes a flue gas recirculation (FGR) system for each burner that lowers NO<sub>x</sub> emissions. The FGR system is currently available for burners rated up to 0.5 mmBtu per hour.

For small high temperature applications up to 2 mmBtu per hour, the cost per burner is similar to the cost for low temperature applications and is in the range of \$5,000 to \$15,000. Using the EPA based multiplier factor of 2.0 to estimate installation cost for individual NO<sub>x</sub> burners in small high temperature equipment is approximately \$10,000 to \$30,000 but can be lower or higher depending upon the components replaced, number of burners and other factors.

Similar to the case of replacing burners in low temperature applications, the cost effectiveness of retrofitting smaller high temperature units with low NO<sub>x</sub> burners for emission reductions of 0.5 pounds per day or less may exceed the SCAQMD minor source BACT NO<sub>x</sub> average cost effectiveness criteria. For example, replacing burners at a cost of \$10,000 to \$30,000 per burner for an emission reduction of 0.5 pound per day per burner over 25 years gives a cost effectiveness range of \$6,150 to \$18,500. However, emissions are highly dependent on the size of unit and operating schedule. A reduction of 0.25 pounds per day per burner for the same cost gives a cost effectiveness range of \$12,300 to \$37,000 per ton. With this smaller emission reduction, the cost effectiveness may exceed the minor source BACT average cost effectiveness criteria of \$27,000 per ton depending upon the cost of the burners and other components selected. For emission reductions less than 0.2 pound per day the cost effectiveness is likely to exceed the BACT average cost effectiveness criteria.

As with low temperature applications, the cost of replacing burners and combustion system components varies depending upon components replaced. Contingent upon the age of the original equipment, the burner or the entire combustion system may require replacement. Installation cost varies between equipment and locations. In addition, the equipment owner

may request additional work that is not required for compliance with Rule 1147 emission limits which will increase the cost of the project.

### **Heating System Cost and Cost Effectiveness for Spray Booths**

The cost difference to a customer between a new certified rule compliant heated spray booth and a new non-compliant unit is less than \$10,000 based on information from manufacturers, vendors and the cost of booths prior to rule adoption. The cost for new units includes markups from the booth manufacturer applied to the cost of the burner, gas train and control system. Most of the specialty booths used for applications other than auto body repair were tested with standard burners, so there was no additional equipment cost to comply with Rule 1147 limits. However, the cost for adding a new natural gas fired certified heating system to an existing spray booth varies from \$30,000 to \$50,000 with a typical cost of about \$40,000. The heating system cost varies depending upon the manufacturer, type of booth and the individual installation.

The cost of a complete new booth is highly variable depending upon the type of booth and options. According to vendor supplied information, the cost to purchase and install a new spray booth is about 20% higher than in 2008 when Rule 1147 was adopted. This increase is consistent with industry data on the cost to purchase and install new equipment (i.e., Marshall & Swift Equipment Cost Index which includes inflation, the cost of materials and manufacturing costs). The typical new installation is a semi down draft (side draft) booth for about \$80,000. A new basic cross draft booth without recirculation is less and the cost of a new full down draft booth is about \$115,000 and up depending upon options. Although the cost for semi down draft and down draft booths are higher than for a basic cross draft, the heating system costs are about the same for basic and premium booths from the same manufacturer or vendor.

The cost effectiveness of a new low NO<sub>x</sub> SCAQMD certified auto repair booth is at most \$22,000 per ton  $[(\$10,000 \text{ at most}) / (70\% \text{ reduction in NO}_x) \times (0.25 \text{ lb/day} / 2000 \text{ lb/ton}) \times 260 \text{ days/year} \times 20 \text{ years}]$ . For higher volume shops, the cost effectiveness is lower than \$22,000/ton.

The cost to retrofit a used booth to install in the SCAQMD as a new permitted unit is significantly less than purchasing a new booth. However, the cost effectiveness for retrofitting an existing permitted auto repair booth with an SCAQMD certified heating system is \$88,000 per ton of NO<sub>x</sub> reduced based on a cost of \$40,000 and a 20 year life. For a high volume booth used two shifts a day, the cost effectiveness could be less than half this value (\$44,000/ton). For a booth retrofit costing \$30,000 the cost effectiveness is \$33,000 to \$66,000 per ton depending upon the number of cars processed. This cost effectiveness of retrofitting an existing permitted booth is higher than the minor source average cost-effectiveness criteria of \$27,000 per ton and may exceed the incremental cost effectiveness of \$81,000 per ton used for equipment without a defined BACT.

Depending upon the age of a used booth, the owner may have to upgrade the booth to meet current building and safety codes. The local building and safety agency may require mechanical, electrical, fire safety and other components be upgraded or replaced. These

costs are not attributable to Rule 1147 and are also not included in the cost effectiveness analysis for new, modified or relocated units that require a new SCAQMD permit.

The preceding analysis indicates the cost effectiveness for upgrading existing spray booths to comply with the Rule 1147 emission limit exceeds the minor source average cost-effectiveness criteria of \$27,000 per ton used by SCAQMD for equipment categories without a defined BACT and in some cases may exceed the incremental criteria of \$81,000 per ton. However, the cost effectiveness for new units is at most \$22,000 per ton and is less than the BACT Guidelines criteria. Because the cost effectiveness to retrofit an existing permitted booth is significantly higher than the minor source BACT criteria, staff is considering amending Rule 1147 to delay compliance for existing in-use permitted booths and heating units until they are modified, relocated or replaced. Staff is proposing that new, modified, or relocated units requiring an SCAQMD permit continue to be required to comply with the Rule 1147 NO<sub>x</sub> limit at the time of modification or installation. Currently a change of ownership in a business with an existing in-use permitted booth is exempt from the retrofit requirement unless the booth or heating unit is modified, relocated, replaced or becomes 20 years old.

## **EXAMPLES OF CALCULATIONS FOR SMALL SOURCES**

A number of equipment replacement scenarios have been submitted to SCAQMD staff as examples of high cost effectiveness for replacing burners in some small Rule 1147 equipment. This section reevaluates some of those scenarios presented to staff. In order to accurately reflect equipment operation and regulatory requirements, the following analyses use permit application information provided by the applicant, SCAQMD permit conditions and SCAQMD BACT guidelines.

### **Afterburner Controlling Smoke and Odors from Smokehouse**

An after burner for a smokehouse has been in operation since the 1960s. The afterburner is rated at 250,000 Btu/hour, is 50 years old and uses pipe burners. NO<sub>x</sub> emissions are more than 101 ppm (0.136 pound/million Btu). According to the equipment permit and application, the smokehouse operates 12 hours per day for three days a week and 4 hours per day two days per week. This operating schedule was confirmed by the company owner when recently questioned by an SCAQMD inspector. A permit condition requires the afterburner to operate whenever the smokehouse is in use (40 to 44 hours per week). If the current afterburner operates an average of 40 hours per week every week, NO<sub>x</sub> emissions over 25 years are 0.88 tons (0.25 mmBtu/hour X [0.136 lb/mmBtu] X [40 hour] X [52 weeks/year] X [25 years] / [2000 lb/ton]). While this operating schedule includes some holidays, it ignores second shifts and weeks when the company operates on a Saturday.

Because of the age and design of this particular afterburner, the entire unit likely needs to be replaced in order to comply with the Rule 1147 NO<sub>x</sub> emission limit. The burners in the unit are pipe burners which are pipes with holes in them. A consultant working with the company estimated that a replacement rule compliant afterburner would cost about \$30,000 (equipment and installation). Staff also contacted vendors to estimate the cost of a replacement afterburner for this application. Based on vendor information, a total project cost of \$30,000 is typical for a new afterburner of this size. A new rule compliant afterburner with emissions of less than 60 ppm (0.72 lb/mmBtu) would reduce emissions



by at least 0.42 tons over 25 years. The estimated cost effectiveness for this emission reduction is \$30,000 divided by 0.42 tons or about \$71,000/ton. For this afterburner and other types of equipment with very small burners, the cost of retrofitting or replacing the unit may be higher than the minor source BACT average cost effectiveness criteria for sources without a defined BACT.

The analysis of this case presented to staff showed a much higher cost effectiveness than \$71,000/ton because it assumed the afterburner operates only one hour per day. However, this afterburner must be operated at all times the oven is operating and contains smoke. This requirement is common to all emission control equipment permitted in the SCAQMD. In fact, the operator of this particular unit was cited in the past by the SCAQMD for not operating the afterburner consistent with this permit requirement.

### **Small Heated Process Tank or Evaporator**

Many small heated process tanks and evaporators have burners, heat exchangers, and tank dimensions that are specific to each manufacturer and product line. Replacement with different burners may require replacement of the entire tank if the heat exchange system cannot be replaced. The cost for replacing the smallest process tank and heat exchange system is at minimum \$30,000 to \$40,000. Burners purchased separately for a new tank rated less than one mmBtu/hour may cost as much as \$5,000 to \$10,000. The minimum cost for a new tank with burners is about \$40,000.

Most small heated tanks and evaporators operate with burners that cycle between high fire and off. A typical small system has burners in the size range of 350,000 Btu per hour (0.35 mmBtu/hour) to one million Btu per hour. NO<sub>x</sub> emissions based on a burner rating of 0.7 mmBtu/hour, a 20 year life and a default emission factor of 0.136 lb/mmBtu for natural gas are about 0.43 pounds per day or 1.1 tons over 20 years  $[(0.7 \text{ mmBtu/hour}) \times (50\%) \times (0.136 \text{ lb/mmBtu}) \times (9 \text{ hours/day}) \times (5 \text{ days/week}) \times (52 \text{ weeks/year}) \times (20 \text{ years}) / (2000 \text{ lb/ton})]$ . This operating schedule does not take into account holidays but it also does not include any weeks with second shifts or operation on Saturdays. A rule compliant system (60 ppm NO<sub>x</sub> or 0.72 lb/mmBtu) would reduce NO<sub>x</sub> emission by about 0.52 tons over a 20 year period. The cost effectiveness for replacing the whole system would be about \$79,000 per ton (\$40,000/ 0.52 tons). The cost to retrofit or replace this type of small low emission unit may be higher than the minor source BACT average cost effectiveness criteria for sources without a defined BACT.

### **Burners for Generating Smoke and Heating Smokehouse Oven**

A smokehouse has been in operations since the 1960s. The burner in the smokehouse is rated 35,000 Btu/hour with NO<sub>x</sub> emissions of more than 101 ppm (0.136 pound/million Btu of natural gas). Since 1990, BACT for smokehouse smoke generators is an electric heating element instead of a gas fired burner. An electric heating element costs less than \$100 including tax and shipping. Electric heating elements come in a variety of shapes and sizes. If the smokehouse burner is similar to round burners used in water heaters or ranges prior to 1983, the owner could also replace the old burner with a low NO<sub>x</sub> burner (15 ppm) used in modern water heaters for about \$100. The cost to install a circuit for the electric heating element or retrofit the gas burner would be about \$500 for a total cost of about \$600.

The burner/heating element in the smokehouse is used to heat wood chips to slowly generate smoke. It is also used to heat the smokehouse and is assumed to operate an average of two hours per day for 5 days each week. The amount of time the burner fires is determined the amount of wood chips and by the required oven temperature. The oven temperature depends upon the type of sausage produced and whether the smoked products contain sodium nitrite. Products without nitrites must be smoked at a higher temperature to kill bacteria.

For this example, the NO<sub>x</sub> emissions over 20 years are 50 pounds (0.0250 tons). The cost effectiveness for replacing the burner with a heating element or low NO<sub>x</sub> burner is at most \$24,000/ton of NO<sub>x</sub> reduced (\$600/0.0250 ton). If the burner or heating element operates for more than two hours per day, the cost effectiveness is lower. This example highlights that some small equipment can be retrofit to comply with Rule 1147 emission limits for low cost and reasonable cost effectiveness. Note that on adoption of Rule 1153.1 at the November 2014 Board meeting, existing smokehouses were removed from Rule 1147, included in Rule 1153.1 and are not required to comply with the rule's emission limits.

### **Independent Review of Cost Effectiveness by ETS, Inc.**

The independent review by ETS, Inc. included a review of the cost and cost effectiveness method used in the draft technology assessment. The detailed ETS review of these elements of the draft technology assessment are included in the ETS report included in Appendix O of this document. ETS also reviewed comments provided by stakeholders. Where sufficient detail was available, ETS found that the cost effectiveness of examples provided by stakeholders were consistent with the findings of this technology assessment. However, much of the cost information provided was for larger equipment and not applicable to the small sources that are the subject of this technology assessment. In addition, for some of the examples provided, there was not sufficient detail to identify the basis of the total project costs provided to ETS. Moreover, the cost provided did not include information on installation of more efficient components and control systems that are eligible for rebates from utilities, that reduce initial project cost, and that reduce utility costs throughout the life of the rebuilt equipment. The ETS review resulted in the following findings:

- On the cost effectiveness method used by SCAQMD staff:
  - ETS agrees with method used by staff because it is consistent with EPA method used by other agencies and with method used for rule development and other district programs
- Costs used for analysis are representative of costs for equipment and installation of burner systems:
- Agree with staff proposal to amend rule to address the following concerns:
  - Replacing heating systems on existing in-use spray booths may result in a cost effectiveness higher than SCAQMD criteria used in other programs
  - Retrofitting units with daily emissions of less than 1 pound/day may result in a cost effectiveness higher than SCAQMD criteria used in other programs

## **RECOMMENDATIONS**

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## RULE CHANGES UNDER CONSIDERATION

The emission testing program for Rule 1147 indicates that most equipment regulated by the rule can comply with the NO<sub>x</sub> emission limit (i.e., Table 2-1). The appendices of this report discuss the emissions test results for each category of equipment which demonstrate compliance with rule emission limits. However, low NO<sub>x</sub> combustion systems are not available for some types of small units. In addition, some categories of equipment are difficult to retrofit. Based on technical feasibility, staff is considering the following changes to Rule 1147:

- Exempt new and existing in-use units with total rated heat input of less than 325,000 Btu/hour from the Rule 1147 NO<sub>x</sub> emission limit. There are no burners in this size range for ovens and dryers that are designed to meet BACT and Rule 1147 emission limits. The smallest low NO<sub>x</sub> air heating burners designed to comply with the 30 ppm NO<sub>x</sub> limit are 400,000 to 500,000 Btu/hour (0.4 to 0.5 mmBtu/hour). If this size burner is set up to operate at less than 325,000 Btu/hour and used in an oven that requires the burner to frequently operate at heat inputs of less than 30% of its capacity, then the burner is not likely to comply with the 30 ppm emission limit. While there are burners in this size range for high temperature equipment including heat treating furnaces and kilns, these units typically use multiple small burners (four or more), have total heat ratings much greater than 325,000 Btu/hour and must comply with a 60 ppm emission limit. This change would affect an unknown number of small units regulated by Rule 1147. Based on comments received from stakeholders and consistent with the recommendations of the ETS review, staff will also consider an higher emission limit of 60 ppm NO<sub>x</sub> for small burners in low temperature applications consistent with the emissions achieved by burners in high temperature applications.
- Delay compliance with the NO<sub>x</sub> emission limit for in-use heated process tanks, evaporators and parts washers with an integrated heated tank until such time the combustion system or tank is modified. New units would be required to meet the emission limit unless the total unit heat rating is less than or equal to 325,000 Btu/hour. Source test information on three of the four available types of heating systems for these heated process tanks can comply with the emission limits. However, if a unit does not comply with the emission limit, the entire process tank must be replaced. Staff estimates this change would affect less than 50 units subject to the Rule 1147 NO<sub>x</sub> emission limit.
- Change the NO<sub>x</sub> emission limit from 30 ppm to 60 ppm NO<sub>x</sub> for the primary chamber of multi-chamber incinerators, burn-off ovens, burn-out furnaces and incinerators that operate below 800 °F. This new limit will be the same compliance limit required for higher temperatures. The burner needed for the primary chamber of these devices is not designed to achieve 30 ppm. This change would affect a small unknown number of units.

Based on cost effectiveness considerations, staff is considering the following changes to Rule 1147:

- Delay compliance with the NO<sub>x</sub> emission limit for most existing in-use spray booths until the booth or heating system is modified, relocated or replaced. Modified, relocated and new spray booths and prep stations would be required to meet the emission limit at the time of modification or installation unless the total unit heat rating is less than or equal to 325,000 Btu/hour. However, staff is considering to evaluate existing in-use operations with multiple booths and locations separately from smaller operations with one location and single booths and prep stations. The cost effectiveness for a new unit that meets the Rule 1147 NO<sub>x</sub> emission limit is at most \$22,000 per ton. The cost effectiveness for retrofitting an existing unit can be as high as \$88,000 per ton. This change will affect more than half of the units now subject to Rule 1147 emission limits. This will result in delays in emission reductions of 0.3 to 0.4 tons/day starting July 1, 2017. These emission reductions forgone will be reduced as new units replace old units.
- Delay compliance with the NO<sub>x</sub> emission limit for other existing in-use units with actual NO<sub>x</sub> emissions of one pound per day or less until the unit or combustion system is modified, relocated or replaced. In addition, if the unit's emissions exceed one pound per day of NO<sub>x</sub> at a later date, then the unit must comply with the NO<sub>x</sub> emission limit. Staff is considering to further evaluate operations with multiple small units whose emissions are significant. Unit emissions can be documented using gas or time meters and daily recordkeeping. The cost effectiveness for retrofitting low emission units varies considerably and can be significantly higher than the SCAQMD BACT Guidelines average cost effectiveness criteria for equipment for which BACT has not been defined. This change will affect at least one quarter of the in-use units subject to the Rule 1147 emission limit. This will result in delays of emission reductions of about 0.3 to 0.5 tons/day starting in July 1, 2017. These forgone reductions will decrease as new units replace old units.

These five changes to the rule would address infeasibility of retrofitting specific types of units and reduce cost by delaying compliance with the NO<sub>x</sub> concentration limit for units with low emissions. These changes would affect at least 4,900 permitted units of which two thirds are spray booths. In addition, up to half of the remaining 1,500 units subject to Rule 1147 may also have NO<sub>x</sub> emissions less than one pound per day which would result in compliance delays for 5,650 out of 6,400 units. These changes will result in a delay in emission reductions of 0.6 to 0.9 tons per day. However, these forgone emission reductions will be made up over 15 to 25 years as old units are replaced with new compliant units.

The independent review by ETS, Inc. resulted in a recommendation to consider for potential future rule development. ETS recommended that the emission limit for afterburner type devices operating below 800 °F should be changed from 30 to 60 ppm based on the preferred burner technology used to provide heat for these devices. SCAQMD staff agrees that this recommendation should be included in future rule development. In

addition, staff is considering raising the emission limit for other processes (e.g., incinerators) that use the same type of burners at temperatures less than 800° F. This will affect a small number of equipment regulated under Rule 1147.

## REFERENCES

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## REFERENCES

EPA, 2002. *EPA Air Pollution Control Cost Manual, Sixth Edition* [EPA-452-02-001], United States Environmental Protection Agency, February 2002

SCAQMD, 2011. *Rule 1147 – NO<sub>x</sub> Reductions from Miscellaneous Sources*, South Coast Air Quality Management District, September 2011.

SCAQMD, 2008. *Rule 1147 – NO<sub>x</sub> Reductions from Miscellaneous Sources*, South Coast Air Quality Management District, December 2008.

SCAQMD, 2000. *Best Available Control Technology Guidelines Part D: BACT Guidelines for Non-Major Polluting Facilities*, South Coast Air Quality Management District (October 2000, Revised October 3, 2008)



## **APPENDICES**

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## Appendix A – Summary of Rule 1147 Equipment Categories

## SUMMARY OF RULE 1147 EQUIPMENT CATEGORIES

Units regulated by Rule 1147 are used in commercial, industrial, government and institutional settings and by a variety of businesses. Rule 1147 affects manufacturers (NAICS 31-33), distributors and wholesalers (NAICS 42) of combustion equipment, as well as owners and operators of ovens, dryers, furnaces, and other equipment in the SCAQMD (NAICS 21, 23, 44, 45, 48, 49, 51-56, 61, 62, 71, 72, 81, and 92).

A wide variety of processes use equipment that is regulated by Rule 1147. These processes include, but are not limited to, coating; printing, textile processing, material processing, and manufacturing using wood, plastics, ceramic and metal materials. A large fraction of the equipment subject to Rule 1147 heat air that is then directed to an oven or dryer in order to dry or cure materials or coatings (convective heating). In addition, most paint booths and semi-enclosed prep-stations that are used to control overspray of coatings during application also have a heat source to accelerate curing and drying of coatings. Other types of equipment heat products directly using a combination of radiant and convective heating (e.g., radiant ovens, kilns, process tanks and furnaces). Some ovens, dryers, furnaces and kilns do not use burners to provide heat and consequently are not regulated by Rule 1147. They use electric heaters, electric infrared lamps, or heat provided by a boiler or thermal fluid heater. Boilers and thermal fluid heaters are regulated by SCAQMD Rules 1146, 1146.1 and 1146.2.

In 2008 SCAQMD staff originally estimated about 6,600 pieces of equipment located at approximately 3,000 facilities would be subject to the emission limits of Rule 1147. Staff also estimated that at least 1,600 units at about 800 facilities already met the NO<sub>x</sub> emission limits of Rule 1147. The remaining 2,200 facilities were expected to require retrofit of at least one unit. Staff estimated up to 2,500 permitted units with NO<sub>x</sub> emission limits greater than one pound per day and an additional 2,500 permitted units with NO<sub>x</sub> emission limits of less than one pound per day might require modifications in order to comply with the emission limits.

Based on an update of the active permitted equipment in the SCAQMD, an estimate of the number of equipment potentially subject to Rule 1147 and the fraction of units in different categories is presented in Figures A-1, A-2 and A-3 below. Staff estimates that as many as 6,400 pieces of equipment are potentially subject to Rule 1147 requirements. More than half of the units ( $\approx$  3,400) are spray booths and prep-stations. Excluding spray booths and prep-stations, staff estimates that at least one quarter of the units in each category will meet Rule 1147 emission limits without retrofitting burners.

The second largest category is ovens and dryers with approximately 1,100 units subject to the rule. Staff estimates that at least one-third of the permitted ovens will meet Rule 1147 emission limits based on a sample of the burners used in the ovens. There are also approximately 500 additional ovens and dryers with SCAQMD permits that are not subject to Rule 1147 because they are heated electrically, with infrared lamps, or using a boiler or

thermal fluid heater. Electric, infrared lamp, and boiler and thermal fluid heated ovens and dryers are not included in the Figures A-1, A-2 and A-3.

The third largest group of equipment is air pollution control units that capture and incinerate VOCs, CO, PM and toxics. There are approximately 900 afterburners, degassing units and remediation units. The remaining categories of equipment have significantly fewer units with metallurgical processes (metal melting and heat treating) being the next largest group with approximately 300 units between the two categories. Although these categories have fewer equipment, many include equipment with significantly higher emissions.

Figure A-1

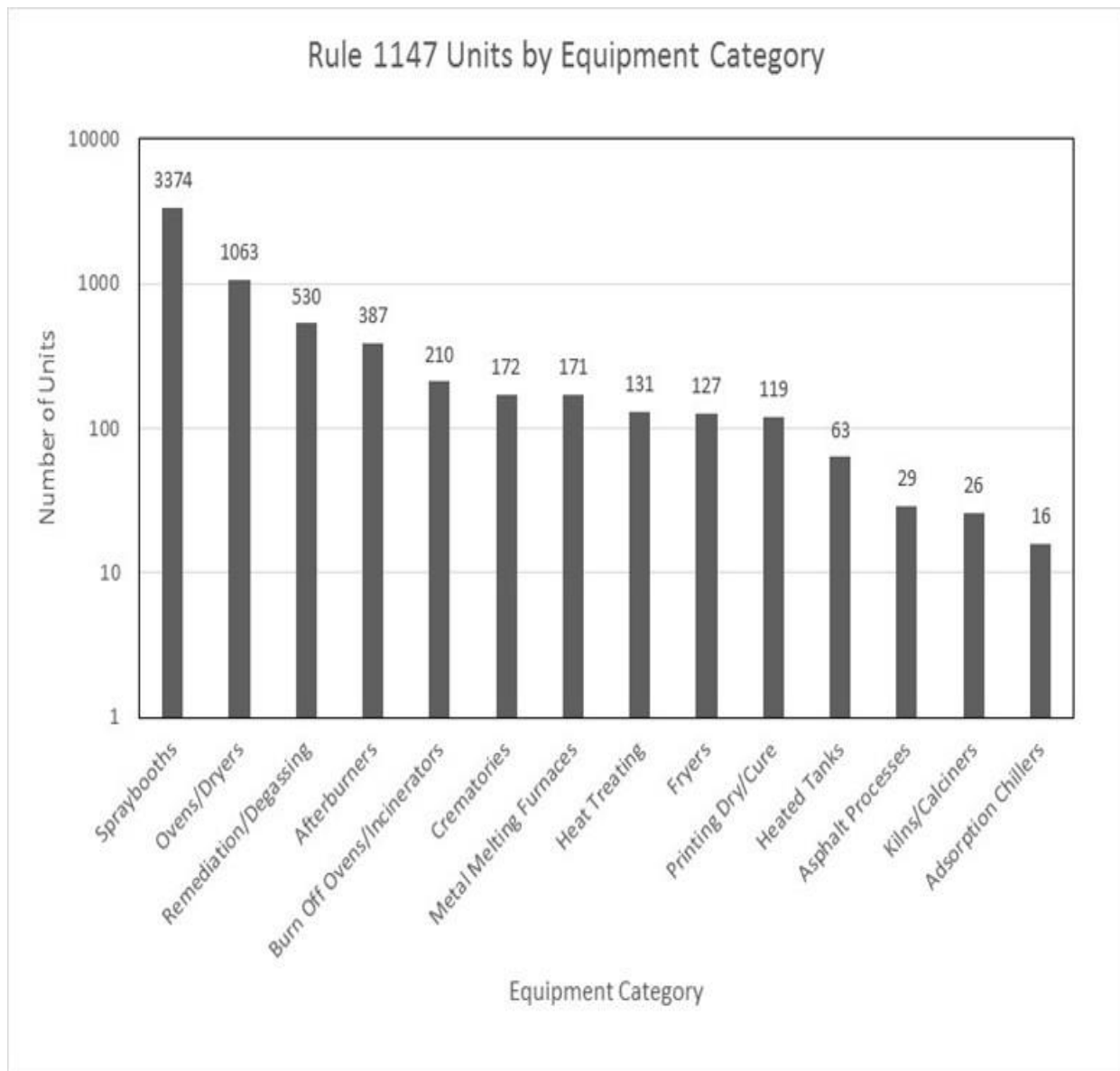


Figure A-2

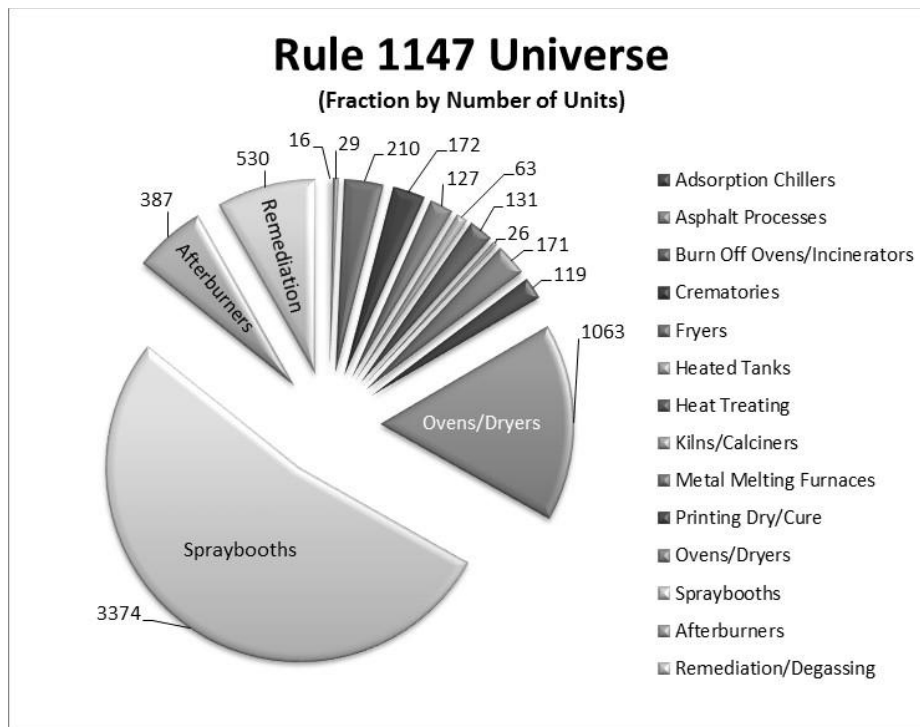
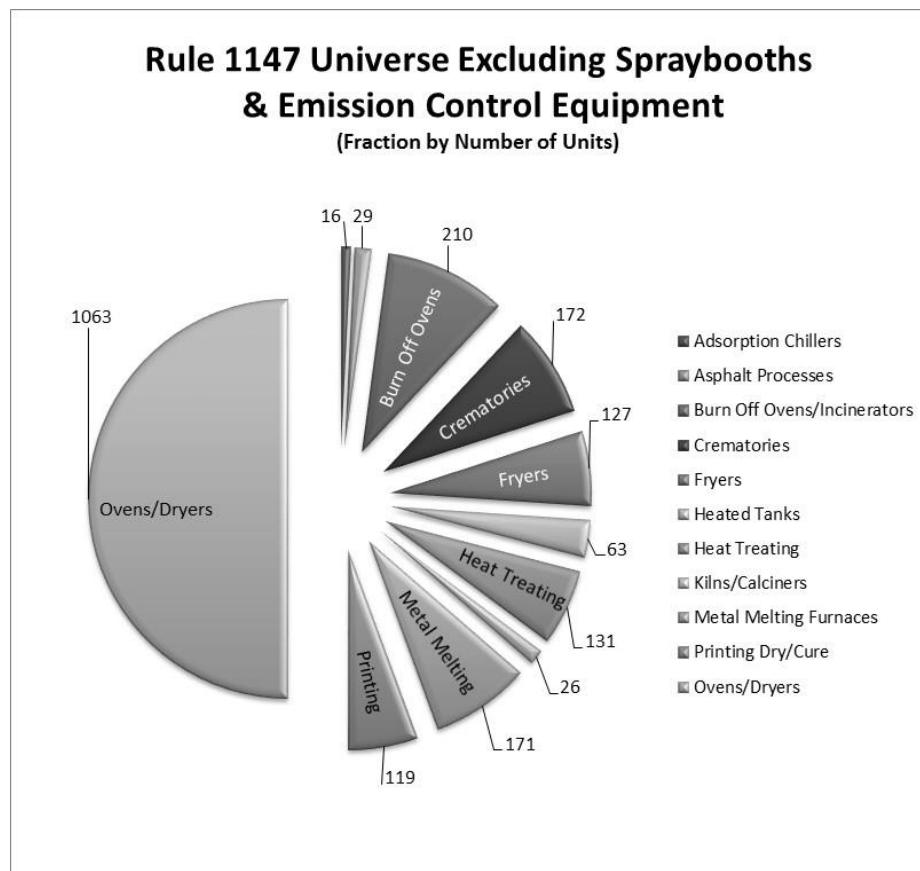


Figure A-3



The focus of this technology assessment is on smaller low emission equipment with emissions of one pound per day or less. An emission level of one pound per day is used to determine a unit's Rule 1147 compliance schedule. Units with emissions of one pound per day or less are provided up to 20 years from date of manufacture before they are required to demonstrate compliance with the NOx emission limit. Units with emissions greater than one pound per day must demonstrate compliance by the time a unit is 15 years old. New or relocated units must demonstrate compliance when they are installed. A potential to emit (PTE) of greater than one pound per day for new or relocated units also triggers the requirement to install best available control technology (BACT) under new source review (NSR) pursuant to SCAQMD Regulation XIII.

Staff has estimated the number of Rule 1147 units with NOx emissions greater than one pound per day based on a unit's PTE in the SCAQMD permit database. For spray booths and prep stations (semi-enclosed spray booths), approximately 5% (about 170) have NOx emissions greater than one pound per day. These higher emitting booths are either larger than the booths used for refinishing automobiles and light trucks or they are used in a production line at a manufacturing facility. For the remaining categories of equipment, approximately 50% have a PTE greater than one pound per day. This means approximately 1,700 units subject to Rule 1147 potentially have NOx emissions greater than one pound per day. The remaining 4,700 units have a PTE of one pound per day or less.

In previous analyses presented in rule staff reports and to the Rule 1147 Task Force, staff estimated that with the exception of spray booths at least 25% of the units in each category will comply with Rule 1147 limits without retrofitting burners. However, recent results from emissions testing of Rule 1147 units suggest that the compliance rate for units with their original burners and NOx emissions greater than one pound per day could be 50% or greater for some categories of equipment. In addition, some units with a PTE less than one pound per day have low emissions because the owner originally installed BACT compliant burners and reduced their PTE below one pound per day. New or modified sources are not required to purchase emission offsets if the average emission increase is a pound per day or less.

As an alternative to estimating emissions based on the inventory developed for the SCAQMD AQMP, total NOx emissions from equipment subject to Rule 1147 can be estimated using these units' PTE and other information. Business owners and equipment vendors indicate typical automotive booths and many other booth operations have annual average emissions of less than one third pound per day. However, up to 200 booths used in manufacturing and other applications may have emissions of a pound per day or more. Based on this information, the 3,400 permitted booths and spray stations have emissions of 0.5 to 0.6 tons NOx per day. The 1,500 other types of combustion equipment with PTE of less than or equal to a pound per day have average emissions of 0.5 pound per day per unit for a total of about 0.4 tons NOx per day. Based on this approach, the 4,700 Rule 1147 units with a PTE equal to or less than one pound per day emit about one ton of NOx per day.

The average PTE for the remaining 1,500 units is 5.6 pounds NOx per day using each unit's 30 day average PTE. The 30 day average PTE is calculated for a month using the weekly operating schedule but the monthly emissions are divided by 30 days instead of the number of days the equipment operates each month. Assuming these 1500 units emit at least half of their 30 day average PTE, the range for the emission estimate from the 1,500 greater than one pound per day units is from 2.1 to 4.2 tons of NOx per day. Using the range for the emission estimates calculated above provides an estimated total Rule inventory of 3.0 to 5.2 tons of NOx per day from the equipment regulated by Rule 1147. This emissions estimate is consistent with the 6.2 tons per day emission estimate developed from the 2007 AQMP for adoption of Rule 1147 in 2008.

It should be noted that the AQMP inventory was based on fuel use and default emission factors. The 2007 AQMP inventory did not take into account lower emissions from units with burners that can achieve BACT emission limits. Using the midpoint of the estimated range for larger sources gives a total inventory estimate of 4.1 tons of NOx per day for Rule 1147 equipment. This emission estimate is consistent with the AQMP inventory and permit information that at least one quarter of the units have burners that can comply with BACT and Rule 1147 emission limits.

In addition, staff estimates that as many as half of the units (750 out of 1,500) with a potential to emit greater than one pound per day may have actual daily NOx emissions less than a pound per day. If this estimate is correct, then half of the units with actual NOx emissions greater than one pound per day of NOx have already been tested (about 375) and comply with Rule 1147 emission limits. Moreover, because of the Rule 1147 compliance schedule, most of the remaining half of the 750 units are likely to have been permitted since 2000 and would have installed burners that will comply with BACT and Rule 1147 emission limits.

**Appendix B – SCAQMD BACT and Test Results for Emission Limits  
Achieved in Practice and Used for Rule Development**



## SCAQMD BACT AND TEST RESULTS FOR EMISSION LIMITS ACHIEVED IN PRACTICE AND USED FOR RULE DEVELOPMENT

Rule 1147 was adopted on December 5, 2008 and amended September 9, 2011. Rule 1147 is based on two control measures from the 2007 Air Quality Management Plan (AQMP): NO<sub>x</sub> reductions from Non-RECLAIM Ovens, Dryers and Furnaces (CMB-01) and Facility Modernization (MSC-01). NO<sub>x</sub> emission from ovens, furnaces, kilns and afterburners had been proposed as control measure CMB-02 in the 1994 and 1997 AQMPs. Facility Modernization was a new AQMP measure that proposed equipment be upgraded to the best available control technology (BACT) available at the time the 2007 AQMP was adopted. The Facility Modernization measure is also proposed to be continued in the upcoming revision to the AQMP.

This appendix provides a summary of the NO<sub>x</sub> BACT determinations and SCAQMD permit limits achieved in practice by different types of units prior to rule adoption in 2008 and the 2011 rule amendment. The following figures were presented in rule development Task Force meetings and Rule 1147 Staff Reports for the 2008 adoption and the 2011 amendment. Figures B-1 to B-4 identify BACT determinations that were published by the SCAQMD and other air agencies prior to rule adoption. Figures B-5 and B-6 identify NO<sub>x</sub> emission limits that were achieved in practice through test results for equipment permitted prior to rule adoption. Figures B-7 and B-8 identify additional emission test results indicating NO<sub>x</sub> emission limits that were achieved in practice by permitted equipment tested in the SCAQMD prior to the 2011 rule amendment.

Figure B-1

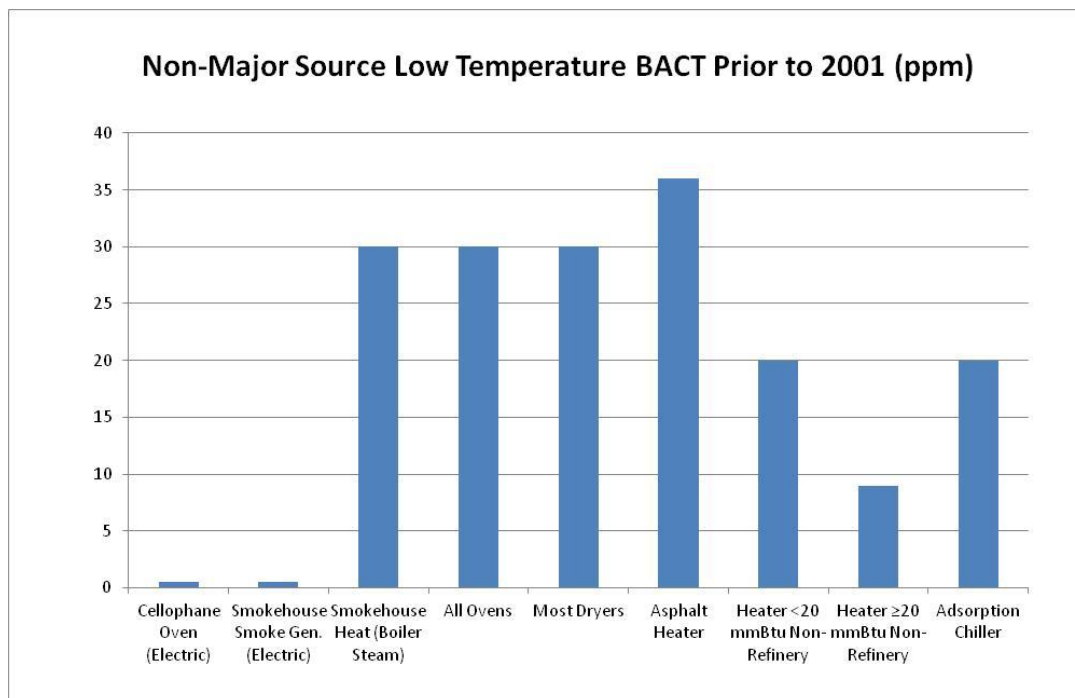


Figure B-2

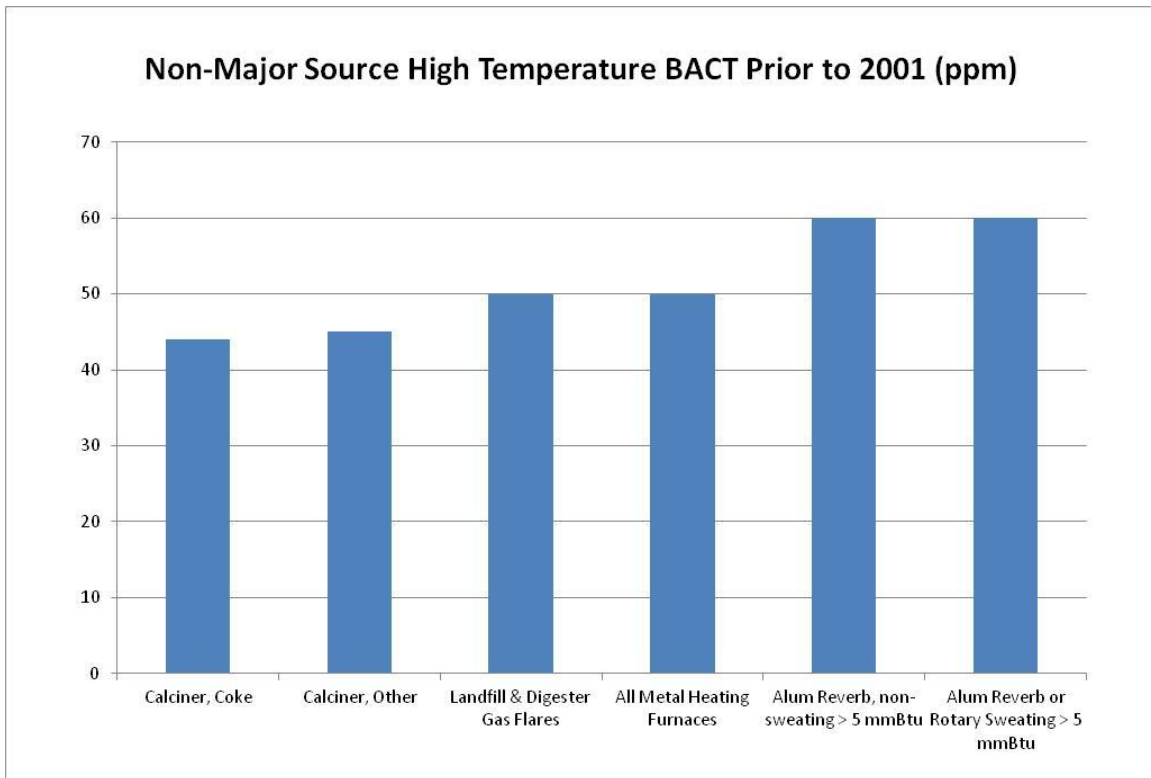


Figure B-3

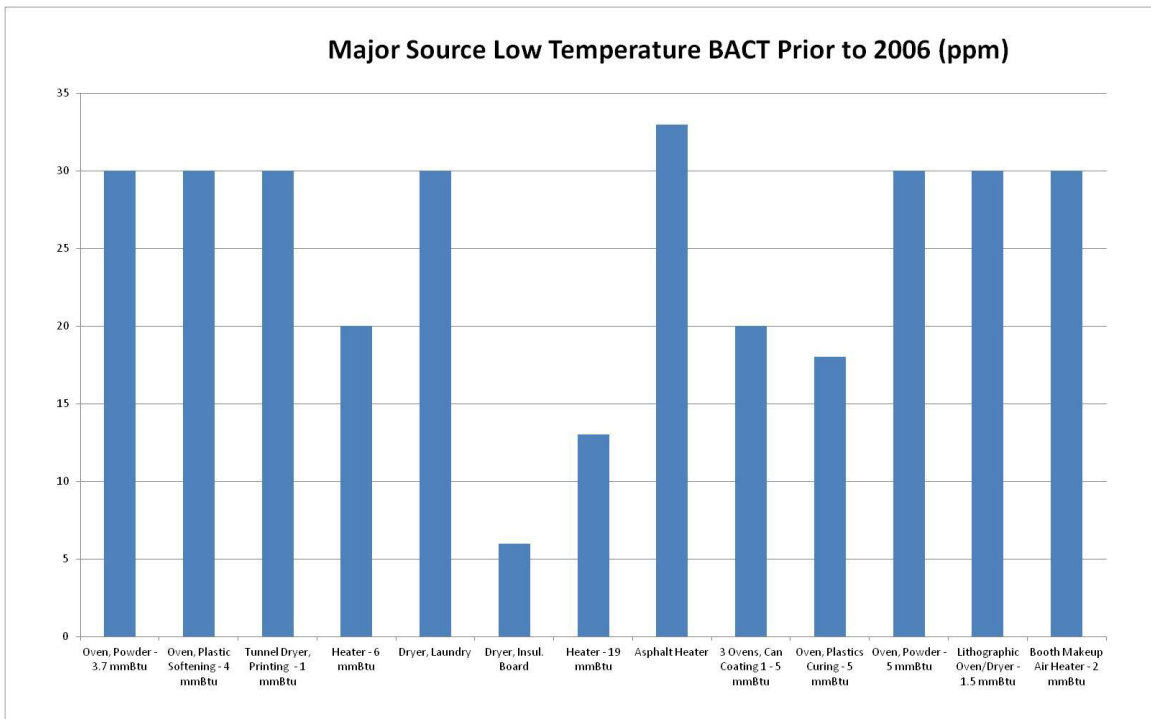


Figure B-4

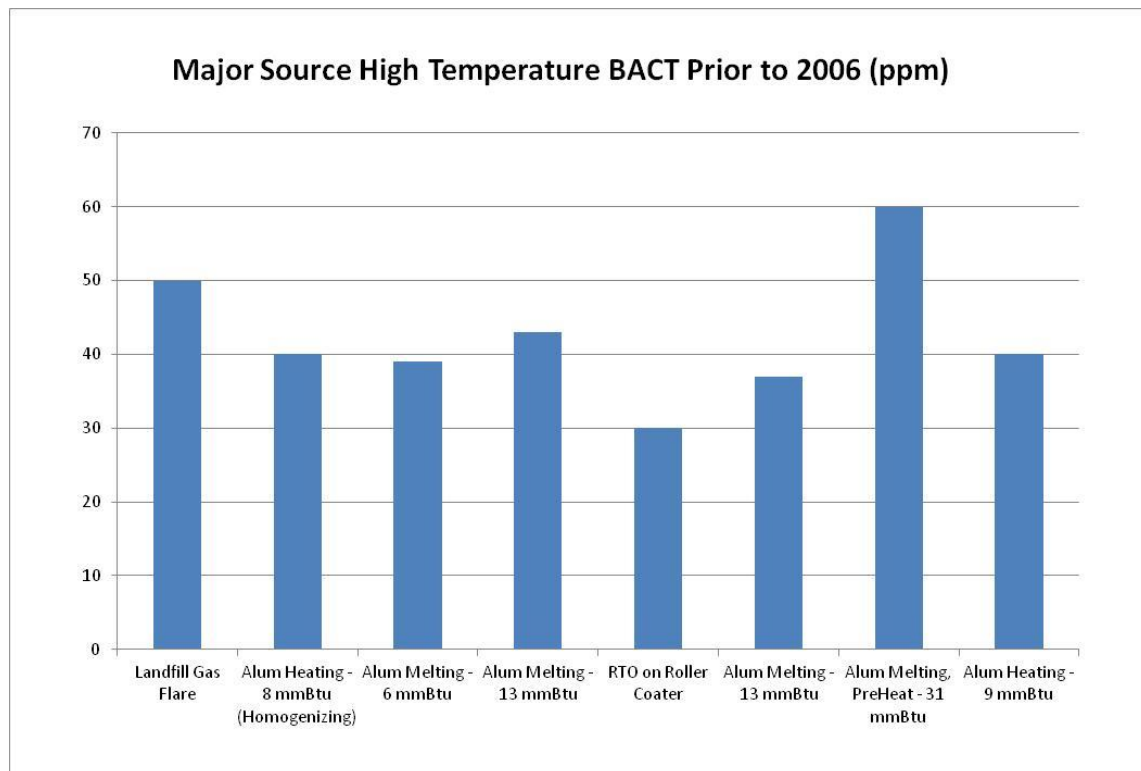


Figure B-5

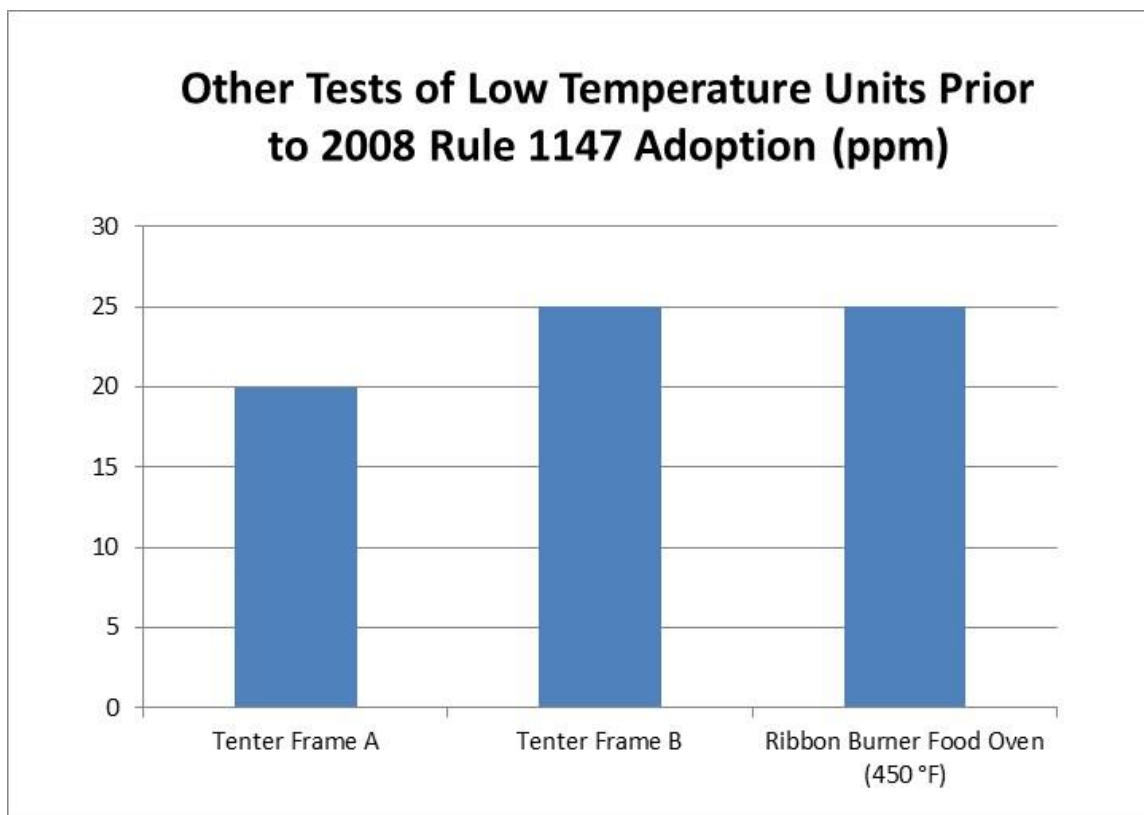


Figure B-6

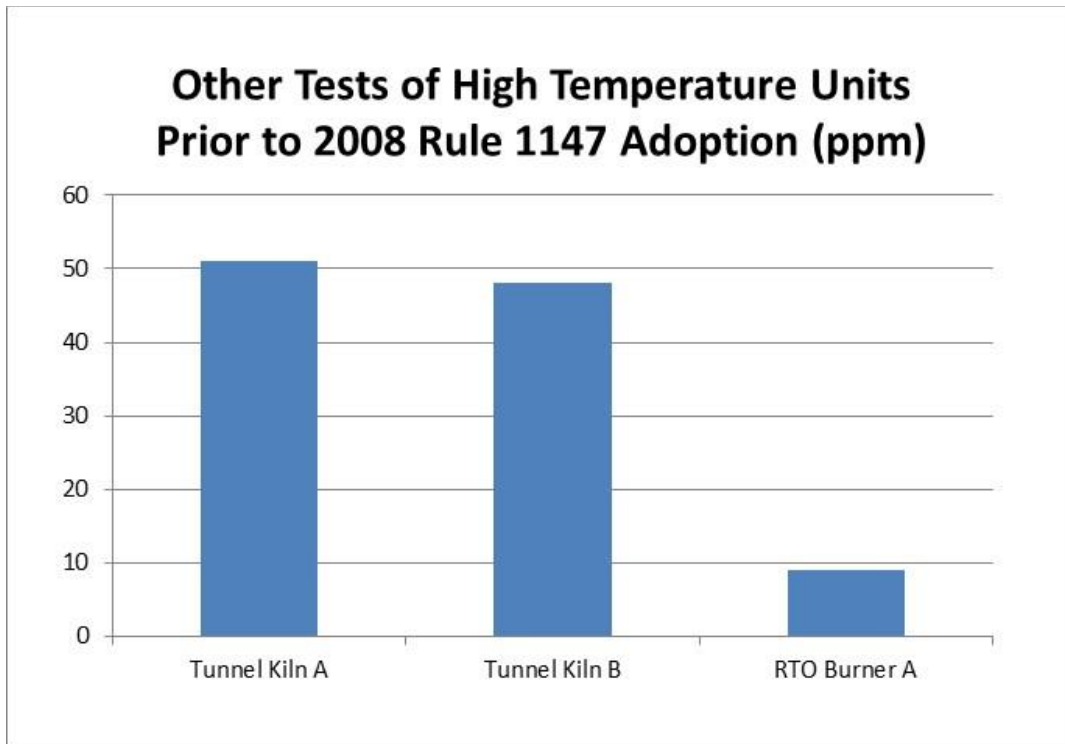


Figure B-7

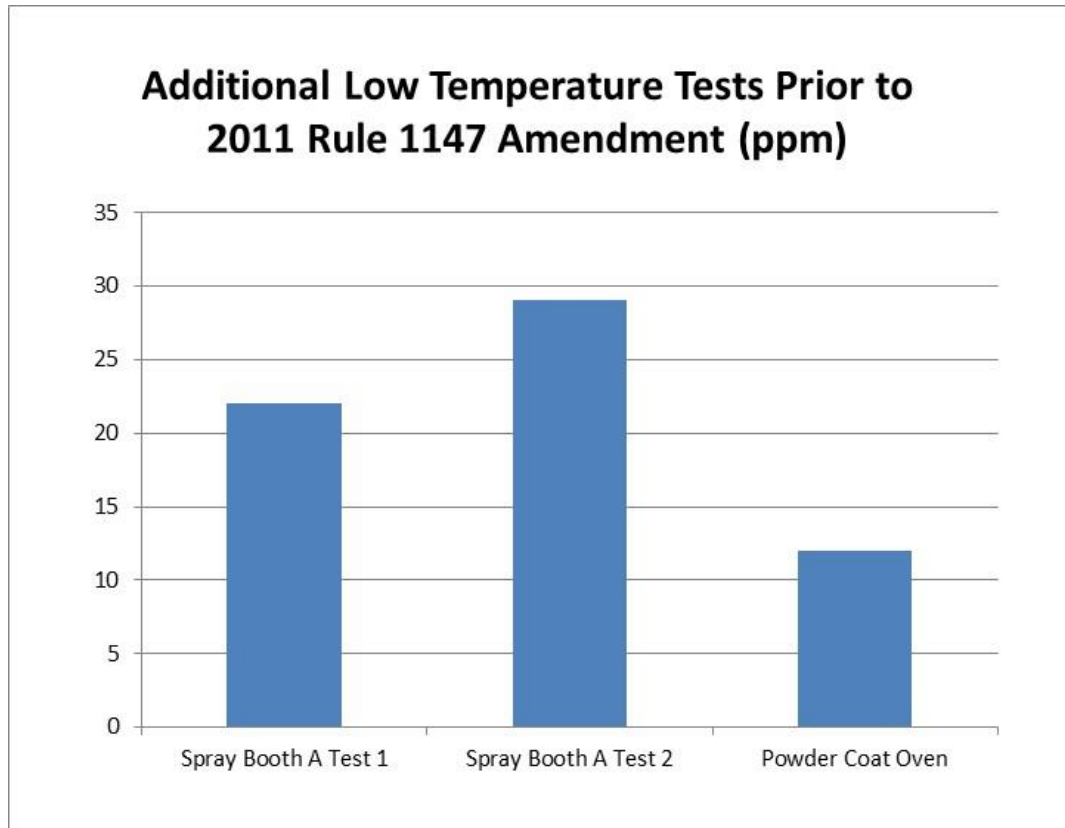
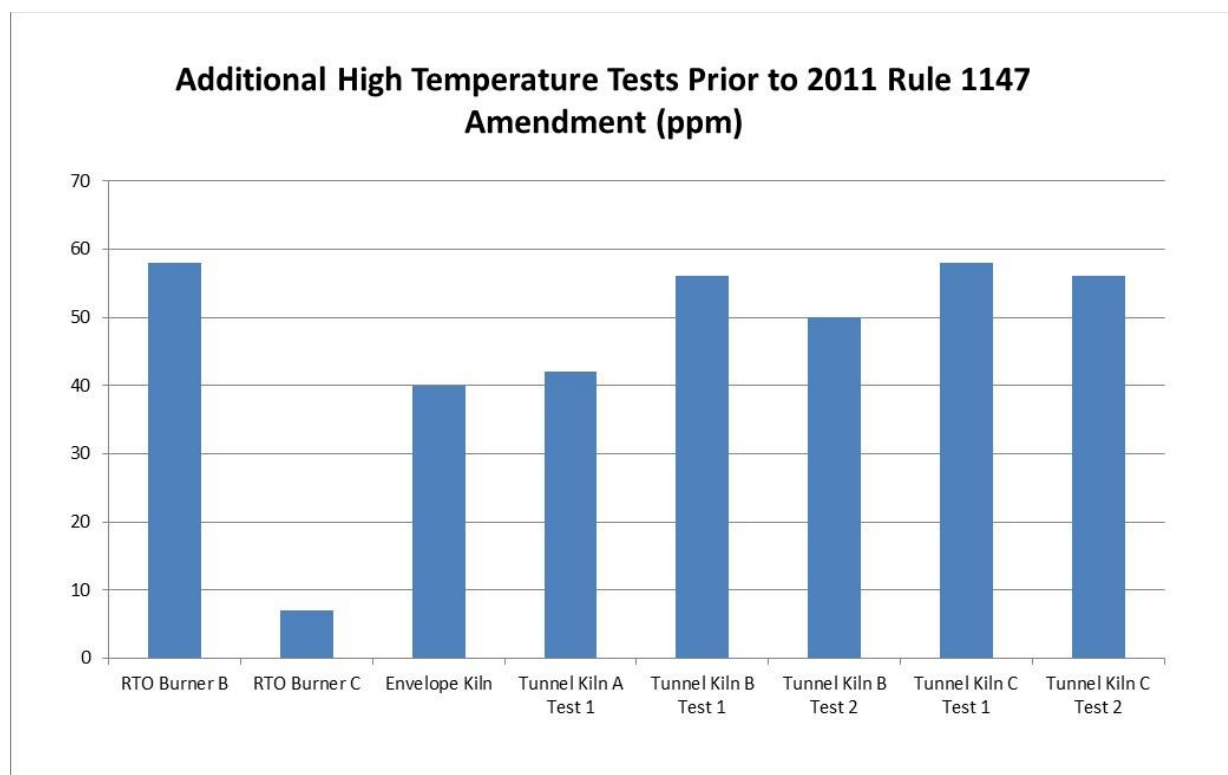


Figure B-8



## Appendix C –Rule 1147 Emission Testing and Test Limitations

## **RULE 1147 EMISSION TESTING AND TEST LIMITATIONS**

Demonstrating compliance with emission or other limits is required for Rule 1147 and all federal, state and SCAQMD air pollution regulations. In order for a new or amended SCAQMD rule to be approved for inclusion in the State Implementation Plan (SIP), test methods must be identified in the rule and approved by CARB and EPA. Rule 1147 identifies test methods that may be used to determine NO<sub>x</sub>, CO, O<sub>2</sub> and CO<sub>2</sub> concentrations and mass emissions.

In addition to EPA approved test methods, the SCAQMD also provides guidelines and generic test protocols to assist equipment owners and testing companies to prepare for and perform approvable emission tests. Because of the large variety of equipment regulated by Rule 1147, the equipment owner and the testing company must submit a test protocol and receive SCAQMD approval before testing a unit.

Emission testing can be more difficult for open direct fired units and dryers that heat large quantities of air because pollutant concentrations are diluted. Examples of these types of equipment include conveyor type ovens, textile dryers and drying ovens. Testing these units may require using a calibrated fuel meter in order to demonstrate compliance with the rule's fuel-based mass emission limit (pounds per million BTU of fuel) and additional sampling and analysis to determine carbon dioxide (CO<sub>2</sub>) concentrations in the exhaust. CO<sub>2</sub> concentrations are used as an alternative to O<sub>2</sub> concentrations in order to adjust NO<sub>x</sub> concentrations to the Rule 1147 reference level of 3% O<sub>2</sub> when exhaust oxygen (O<sub>2</sub>) concentrations are high (close to ambient levels),

The test results used for this report have been reviewed by SCAQMD Engineering, Compliance and Source Testing staff. When Rule 1147 emission testing protocols and test reports are reviewed by SCAQMD staff, they are rated as acceptable, conditionally acceptable, or unacceptable. Test reports are classified unacceptable when the report does not include all required documentation, the test was not performed consistent with the test method and approved protocol, or the test results cannot be used to demonstrate compliance with the applicable emission limit.

Tests reports are classified conditionally acceptable when the test results indicate compliance with the applicable emission limit but results are adjusted by SCAQMD staff, emissions cannot be estimated accurately but mass emissions or concentrations are equal to or less than the applicable emission limit or carbon monoxide (CO) emissions cannot be accurately determined. Rule 1147 does not include a CO emission limit because the SCAQMD is in compliance with federal and California ambient air quality standards. However, CO concentrations are routinely measured to ensure compliance with permit or facility requirements if applicable.

The most common reason for an emission test report to be rated conditionally acceptable is the reported emissions of NO<sub>x</sub> or CO have been adjusted by staff so results are consistent with SCAQMD testing and reporting guidelines. Mass emissions or concentrations may

be adjusted higher or lower but the adjusted results demonstrate compliance with the rule limit.

For many test results, emissions are expressed as less than a specific concentration or mass emission rate that demonstrates compliance with the applicable emission limit. In order to be considered accurate, SCAQMD guidelines require that test results fall between 20% and 95% of the concentration of the highest concentration (high span) calibration gas used for that pollutant for that test. When results are not within the test's acceptable range, they are adjusted up to 20% of the acceptable range if they are lower, additional calibration gasses are tested to expand the range or define a lower sub-range, or the test is repeated using a different set of calibration gasses.

Adjustment up to the low end of the acceptable range (20% of the high span calibration gas) is a common result for equipment with dilute pollutant concentrations and high O<sub>2</sub> concentration in the unit's exhaust. Although these test results can be used to demonstrate that pollutant levels are less than a specific concentration (i.e., the low end of the acceptable range), they cannot be used to accurately estimate concentration or mass emissions. When the estimated concentrations are lower than the acceptable range of the individual test but an adjustment up to 20% of the acceptable range is still less than or equal to the applicable emission limit, the test result is satisfactory for the needs of the client and no further calibration or testing is performed by the testing company.

Test results for CO are often adjusted up to 20% of the acceptable range and because most permits do not limit CO emissions, no further analysis for CO is performed. However, when CO concentrations are adjusted up to 20% of the acceptable range, the adjusted estimated CO concentration can be up to three orders of magnitude higher than the actual concentration.

In summary, testing is performed to demonstrate compliance with an emission limit and businesses and testing companies do enough calibration, testing and calculation to prove that pollutant concentration or mass emissions are below the applicable limit. Most Rule 1147 emission test results are adjusted by the testing company or SCAQMD staff to address issues with a test's acceptable range or with other testing and calculation issues. As a result, most test results can demonstrate compliance but cannot be used to accurately estimate concentrations or mass emissions from individual units and categories of equipment.

Table C-1 provides a summary of submitted Rule 1147 NO<sub>x</sub> emission test results that have completed SCAQMD staff review and demonstrated compliance with Rule 1147 emission limits as of March 2015. Table C-1 shows the number of test results and average NO<sub>x</sub> emission concentrations for units tested at the highest and at a low firing rate if applicable. In most cases the highest firing rate tested is the normal operating condition. However, in a small number of cases the low firing rate is the normal condition. The table also indicates the applicable NO<sub>x</sub> emission limit for each category of equipment. Table C-1 does not include results from tests that were subsequently repeated because the original test did not comply with test method or SCAQMD guidelines. In addition, the table does not



include test results for units that were shut down or that were withdrawn by the unit operator.

Table C-1  
Rule 1147 Emission Test Results

Equipment Category	Rule 1147 NOx Limit (ppm <sup>1</sup> )	Number of Units Tested at Normal/High Fire	Average NOx Concentration at Normal/High Fire (ppm)	Number of Units Tested at Low Fire	Average NOx Concentration at Low Fire (ppm)
Afterburner/Regenerative Thermal Oxidizer	30 or 60 <sup>2</sup>	13	26	4	13
Afterburner/ Thermal or Catalytic Oxidizer	30 or 60 <sup>2</sup>	9	40	1	41
Afterburner/Remediation Unit	60	2	23	1	24
Spray Booth (Automobile)	30	10	24		
Spray Booth (Other)	30	13	18	2	22
Crematory	60	20	50		
Dryer/Asphalt	40	1	35		
Fryer	60	7	29		
Fuel Cell Heater	30 or 60 <sup>2</sup>	1	11	1	9
Heated Tank	60	7	37	1	34
Metallizing Spray	30 or 60 <sup>2</sup>	1	22		
Metal Heat Treat	60	23	48		
Metal Melting (Large)	60	8	42	1	58
Metal Melting Pot/Crucible	60	5	54		
Multi-chamber Burn Off Oven or Furnace	30/60 or 60/60 <sup>3</sup>	11	42 <sup>4</sup>		
Multi-chamber Incinerator	30/60 or 60/60 <sup>3</sup>	1	54 <sup>4</sup>		
Oven/Dryer	30 or 60 <sup>2</sup>	112	20	35	21
Print Dryer/Oven	30	19	20	4	23
Textile Shrink Dryer	30	2	24		
Textile Tenter Dryer	30	4	23	4	26
Unit Heater	30 or 60 <sup>2</sup>	3	20	1	13
<b>Number of Units</b>		<b>272</b>		<b>55</b>	

<sup>1</sup> The Rule 1147 NOx limit is based on a reference level of 3% oxygen (O<sub>2</sub>) in the exhaust. All emission test results are converted to a concentration in parts per million at the reference level of 3% O<sub>2</sub>.

<sup>2</sup> The emission limit depends upon the process temperature.

<sup>3</sup> The emission limit for the primary chamber varies depending upon process temperature.

<sup>4</sup> Average NOx emissions measured after the secondary chamber (afterburner).

## Appendix D – Calculation of Cost Effectiveness

## **CALCULATION OF COST EFFECTIVENESS**

Cost effectiveness calculations for this document are performed using the methodology in SCAQMD's BACT guidelines and cost effectiveness analyses for rule development. Note that there is one key difference in the calculation of cost effectiveness between the BACT Guidelines and rule development. For rule development, a best estimate of equipment's useful life is used in the calculation of cost effectiveness instead of a fixed 10 year assumption that is associated with financing of new equipment. In addition, in rule development various emission control options are evaluated to determine the option that provides the most reductions and reasonable cost effectiveness.

For new source review (NSR) under SCAQMD Regulation XIII, equipment for which BACT is defined must meet the emission limits defined by BACT regardless of the cost. This applies to equipment at both major and non-major sources (facilities). However, for permit applications for new equipment without established BACT at non-major sources, SCAQMD staff is required to evaluate the cost effectiveness of emission reduction options. New, modified or relocated equipment with a potential to emit of one pound per day or less are not required to comply with BACT by the SCAQMD.

The cost effectiveness analysis determines which emission reduction options are below the SCAQMD Board approved maximum cost effectiveness limits established by the SCAQMD BACT committee for equipment without minor source BACT. In addition, the SCAQMD BACT guidelines and rule development are required to calculate incremental cost effectiveness for the difference in cost and emission reductions between two or more emission control options. The cost effectiveness criteria for processes that do not have an established BACT is currently about \$27,000 per ton of NO<sub>x</sub> for average cost effectiveness and about \$81,000 per ton of NO<sub>x</sub> for the incremental cost effectiveness between two or more control options. A copy of the section of the SCAQMD BACT Guidelines that discusses calculation of cost effectiveness is included in Attachment 1 of this appendix.

### **Independent Review of Cost Effectiveness by ETS, Inc.**

The independent review by ETS, Inc. included a review of the cost and cost effectiveness method used in the draft technology assessment. The detailed ETS review of these elements of the draft technology assessment are included in the ETS report included in Appendix O of this document. ETS also reviewed comments provided by stakeholders. Where sufficient detail was available, ETS found that the cost effectiveness of examples provided by stakeholders were consistent with the findings of this technology assessment. However, much of the cost information provided was for larger equipment and not applicable to the small sources that are the subject of this technology assessment. In addition, for some of the examples provided, there was not sufficient detail to identify the basis of the total project costs provided to ETS. Moreover, the cost provided did not include information on installation of more efficient components and control systems that are eligible for rebates from utilities, that reduce initial project cost, and that reduce utility costs throughout the life of the rebuilt equipment. The ETS review resulted in the following findings:

- On the cost effectiveness method used by SCAQMD staff:
  - ETS agrees with method used by staff because it is consistent with the EPA method used by other agencies and with the method used for rule development and for other district programs
- Costs used for analysis are representative of costs for equipment and installation of burner systems:
- Agree with staff proposal to amend rule to address the following concerns:
  - Replacing heating systems on existing in-use spray booths may result in a cost effectiveness higher than SCAQMD criteria used in other programs
  - Retrofitting units with daily emissions of less than 1 pound/day may result in a cost effectiveness higher than SCAQMD criteria used in other programs

Attachment 1 of Appendix D – Cost Effectiveness Methodology from  
Part C: Policy and Procedures for Non-Major Polluting Facilities of July  
2006 SCAQMD Best Available Control Technology Guidelines

## Attachment 1

### Cost Effectiveness Methodology

Cost effectiveness is measured in terms of control costs (dollars) per air emissions reduced (tons). If the cost per ton of emissions reduced is less than the maximum required cost effectiveness, then the control method is considered to be cost effective. This section also discusses the updated maximum cost effectiveness values, and those costs, which can be included in the cost effectiveness evaluation.

There are two types of cost effectiveness: average and incremental. Average cost effectiveness considers the difference in cost and emissions between a proposed MSBACT and an uncontrolled case. On the other hand, incremental cost effectiveness looks at the difference in cost and emissions between the proposed MSBACT and alternative control options.

Applicants may also conduct a cost effectiveness evaluation to support their case for the special permit considerations discussed in Chapter 2.

### Discounted Cash Flow Method

The discounted cash flow method (DCF) is used in the MSBACT Guidelines. This is also the method used in the 1999 Air Quality Management Plan. The DCF method calculates the present value of the control costs over the life of the equipment by adding the capital cost to the present value of all annual costs and other periodic costs over the life of the equipment. A real interest rate\* of four percent, and a 10-year equipment life is used. The cost effectiveness is determined by dividing the total present value of the control costs by the total emission reductions in tons over the same 10-year equipment life.

### Maximum Cost Effectiveness Values

The MSBACT maximum cost effectiveness values, shown in Table 4, are based on a DCF analysis with a 4% real interest rate.

**Table 4: Maximum Cost Effectiveness Criteria (Second Quarter 2003)**

Pollutant	Average (Maximum \$ per Ton)	Incremental (Maximum \$ per Ton)
ROG	20,200	60,600
NOx	19,100	57,200
SOx	10,100	30,300
PM <sub>10</sub>	4,500	13,400
CO	400	1,150

The cost criteria [in Table 4] are based on those adopted by the AQMD Governing Board in the 1995 BACT Guidelines, adjusted to second quarter 2003 dollars using the Marshall and Swift Equipment Cost Index. Cost effectiveness analyses should use these figures adjusted to the latest Marshall and Swift Equipment Cost Index, which is published monthly in Chemical Engineering.

\* The real interest rate is the difference between market interest rates and inflation, which typically remains constant at four percent.

### Top Down Cost Methodology

The AQMD uses the top down approach for evaluating cost effectiveness. This means that the best control method, with the highest emission reduction, is first analyzed. If it is not cost effective, then the second-best control method is evaluated for cost effectiveness. The process continues until a control method is found to be cost-effective.

AQMD staff will calculate both incremental and average cost effectiveness. The new MSBACT must be cost effective based on both analyses.

### Costs to Include in a Cost Effectiveness Analysis

Cost effectiveness evaluations consider both capital and operating costs. Capital cost includes not only the price of the equipment, but the cost for shipping, engineering and installation. Operating or annual costs include expenditures associated with utilities, labor and replacement costs. Finally, costs are reduced if any of the materials or energy created by the process result in cost savings. These cost items are shown in Table 5. Methodologies for determining these values are given in documents prepared by USEPA through their Office of Air Quality Planning and Standards (OAQPS Control Cost Manual, 4th Edition, USEPA 450/3-90-006 and Supplements).

The cost of land will not be considered because 1) add-on control equipment usually takes up very little space, 2) add-on control equipment does not usually require the purchase of additional land, and 3) land is non-depreciable and has value at the end of the project. In addition, the cost of controlling secondary emissions and cross-media pollutants caused by the primary MSBACT requirement should be included in any required cost effectiveness evaluation of the primary MSBACT requirement.

**Table 5: Cost Factors**

#### Total Capital Investment

Purchased Equipment Cost	Indirect Installation Costs
Control Device	Engineering
Ancillary (including duct work)	Construction and Field Expenses
Instrumentation	Start-Up
Taxes	Performance Tests
Freight	Contingencies
Direct Installation Cost	
Foundations and Supports	
Handling and Erection	
Electrical	
Piping	
Insulation	
Painting	

Total Annual Cost

## Direct Costs

Raw Materials

Utilities

- Electricity

- Fuel

- Steam

- Water

- Compressed Air

Waste Treatment/Disposal

Labor

- Operating

- Supervisory

- Maintenance

Maintenance Materials

Replacement Parts

## Indirect Costs

Overhead

Property Taxes

Insurance

Administrative Charges

Recovery Credits

Materials

Energy



## Appendix E – Afterburner Technologies

## AFTERBURNER TECHNOLOGIES

The afterburner category is comprised of a variety of technologies that are used to capture and incinerate VOCs, PM and toxic air contaminants. These include direct flame afterburners (often called an oxidizer or incinerator), regenerative thermal oxidizers (RTO) that heat a ceramic bed which oxidizes pollutants, and catalytic oxidizers which incinerate pollutants with the help of a catalytic matrix. Remediation systems for removing contaminants from soil or groundwater also use the same types of technologies to incinerate VOCs or toxic air contaminants.

Alternative non-combustion technologies for control of VOC, PM and toxic air pollutants are also available and include electrostatic precipitation, wet or dry scrubbers, carbon adsorption, and other filter media. Remediation systems and some other types of units may combine carbon adsorption or other technologies with a direct flame, catalytic or regenerative thermal oxidizer. An afterburner or oxidizer can also be as simple as a stack with a burner and pilot flame (i.e., a flare).

At the time of rule development, two sources of information were available to identify BACT for this category of equipment. BACT determinations had been made for flare based oxidizers. These determinations established a BACT/LAER limit for non-major and major sources of 50 ppm NO<sub>x</sub>. However, there were a significant number of flare based oxidizers that had been permitted with a 60 ppm NO<sub>x</sub> limit prior to that BACT determination. In addition, emission test results that varied across a range from below 30 ppm up to about 50 ppm NO<sub>x</sub> for new catalytic and regenerative thermal oxidizer systems were being used by the SCAQMD permitting group as the basis to require new applicants to meet equivalent emission limits. Given the variety of processes used as afterburners, their different emission characteristics and older equipment permitted at emission levels close to but above some current BACT levels, a rule NO<sub>x</sub> limit of 60 ppm was proposed for this category of equipment and adopted in Rule 1147.

Depending upon the type of afterburner system, different burners are used. Most of the RTOs tested use a high temperature Maxon Kinedizer burner but one uses an air heating burner from Eclipse – the Winnox burner. A Kinedizer burner is also used in a remediation unit that incorporates an RTO. Thermal and catalytic oxidizers use a variety of burners from Maxon, MidCo, Eclipse, and others. Some of these units use air heating burners and others use higher temperature burners such as the Eclipse Thermjet. A variety of burners are also used in remediation units that incorporate a thermal or catalytic oxidizer.

Newer flare based systems incorporate low NO<sub>x</sub> burners that can meet the 60 ppm NO<sub>x</sub> limit (e.g., John Zink and Flare Industries/Bekaert). However, RTO based systems offer a significant advantage over direct flame systems because they can significantly reduce fuel consumption and the cost of operating the system. Staff is aware of one facility that replaced an old flare based oxidizer with a new RTO in order to meet the Rule 1147 emission limit and to reduce fuel cost.

The afterburners that have been tested are used to control emissions from a wide variety of processes. Afterburners are widely used to control emissions of VOCs and PM from printing, coating and chemical manufacturing operations. Afterburners are also used for the control of VOCs from food bakery ovens and fryers. Larger coffee roasters are required to use afterburners to control emissions of PM, toxics and for odor control. One tested unit controls emission of PM from an animal feed dryer. Several of the tested units are portable and are used to control emissions of VOCs from degassing of storage tanks, pipelines and other equipment.

The 24 units tested easily passed the 60 ppm NO<sub>x</sub> limit. Most of the units were tested with their original burners. The RTO and remediation units have average NO<sub>x</sub> emissions of about 25 ppm at high fire with a range of 16 to 55 ppm. One unit with emissions of 55 ppm NO<sub>x</sub> has a Maxon Kinemax burner instead of a Kinedizer. Thermal and catalytic oxidizers averaged about 40 ppm NO<sub>x</sub> with a range of 21 to 54 ppm at high fire. Units with air heating burners including the Eclipse Winnox have lower emissions than units with high temperature burners such as the Eclipse Thermjet.

A large number of afterburner units using different combustion technologies have been tested and comply with the Rule 1147 NO<sub>x</sub> emission limit of 60 ppm. Most of the units complied with the emission limit using their original burners. The emission vary depending upon the combustion technology. However, all of the units for which tests were submitted and reviewed comply with the rule emission limit.

Because the preferred burner type for afterburner applications cannot easily meet the 30 ppm NO<sub>x</sub> emission limit in processes operating at temperatures less than 800° F, the independent reviewer of the draft technology assessment (ETS) recommended changing the limit to 60 ppm. Staff agrees with this recommendation. In addition, staff is considering raising the emission limit for other processes (e.g., incinerators) that use the same type of burners at temperatures less than 800 ° F. This will affect a small number of equipment regulated under Rule 1147.

## Appendix F – Spray Booths

## **SPRAY BOOTHS**

A variety of coating operations use heated spray booths and prep stations. Prep stations are paint booths that are not fully enclosed. The majority of heated spray booths in the SCAQMD are auto body refinishing booths used for refinishing passenger cars and light trucks. Larger booths are used for industrial coating operations, large trucks and trailers and a variety of maintenance applications. In addition, auto body type spray booths are also used by manufacturing operations for drying and curing components and assembled products. An achieved in practice LAER/BACT limit of 30 ppm NO<sub>x</sub> for makeup air heaters in spray booth applications and the fact that many SCAQMD permitted booths are used as curing or drying ovens in manufacturing operations justified a Rule 1147 NO<sub>x</sub> limit of 30 ppm. It should be noted that BACT for ovens and most dryers has been 30 ppm NO<sub>x</sub> since 1998.

To date, only new or relocated spray booths have been subject to the Rule 1147 emission limit. Because more than 90% of in-use heated booths are estimated to have annual average emissions less than one pound per day of NO<sub>x</sub>, existing units are not subject to the emission limit until on or July 1, 2017. Most of the new booths have been installed in the SCAQMD are for auto body repair and have been permitted based on certification of the burner and related components of the makeup air unit for the booth.

Auto body repair businesses use paint booths for reducing the amount of spray leaving the facility and keeping dust off newly painted surfaces. In addition, booths speed up the drying process by moving air through the booth. Spray booths can also be fitted with heating units that further accelerate the drying and curing of coatings.

Auto body repair businesses use heated booths in order to increase the number of painted cars that can be dried in a day. Businesses that coat four or more cars a day use heated booths. About three painted cars can be dried each day with an unheated booth. According to spray booth vendors, the average number of cars dried per day in a spray booth is about five. The maximum number of cars that can be processed by a heated booth during one shift is eight. Some auto body repair businesses operate more than one shift per day thus increasing the number of cars processed.

### **Technology**

Ten booths used in auto body repair from a variety of manufacturers have been tested as part of the process to certify a company's spray booth heating systems. These certified units comply with the Rule 1147 emission limit of 30 ppm NO<sub>x</sub> and with workplace exposure standards for CO. To date, all of the certified spray booths have used a burner system from MidCo. This new low NO<sub>x</sub> burner replaced line burners in a number of booth manufacturers heating units. Many of the previous units were built around a MidCo line burner. Since 2010, more than 125 low NO<sub>x</sub> heating systems based on the MidCo low NO<sub>x</sub> burner have been installed in the SCAQMD. The majority of these have been installed in heating units for new auto body spray booths.

Several spray booth manufacturers have taken advantage of the option to certify their booths and heating system. Certified models do not require individual emission tests. Currently there are 32 models of booths and heating systems from eight manufacturers certified compliant with the Rule 1147 emission limit. Non-certified models must perform individual tests in order to receive an SCAQMD permit. The SCAQMD certified systems vary from basic cross flow booths to down flow booths constructed with below ground air exhaust systems. The manufacturers represent a significant portion of the industry and include companies that manufacture their booths and heating systems in California.

The SCAQMD permitting group certifies the whole spray booth mechanical system including the combustion components. This approach significantly increases the cost of retrofitting existing spray booths with certified low NO<sub>x</sub> burners. To use an SCAQMD certified burner on a used spray booth, the owner/operator must also install a new heater box, blower, other mechanical components with a new thermostat and control system for moving air in addition to installing the burner, mounting hardware and combustion control system.

Other manufacturers have decided not to certify their heating units, but instead have decided to have their distributors and local installers test each new installation. For example, three auto body booths at one location have been tested and complied with the Rule 1147 NO<sub>x</sub> limit using a newer design line burner from Maxon.

Other types of booths and some auto body booths used for different applications have also been tested and comply with the Rule 1147 emissions limit. These units submitted individual emission test results. Thirteen test results have been submitted for booths that are not used for auto body repair. These booths use heating units or burners from Hastings, MidCo, PowerFlame, and Riello. In these cases, the air movement system and other components were not required to be replaced by the SCAQMD.

The burners in these other booths use a variety of technologies to achieve the emission limit of 30 ppm. The heater manufactured by Hastings is a roof mounted unit that can also be used to heat other processes or large building spaces such as a warehouse. All of the burners in these systems use premixing of air and fuel with a controlled amount of excess air to reduce emissions. The MidCo burner uses a knit steel fabric material to stabilize and spread the flame over a larger surface area to reduce peak flame temperature and NO<sub>x</sub> emissions. The Hastings, PowerFlame and Riello burners use premixing, swirl for mixing with air in the combustion zone and other technologies to keep emissions low. The new control systems for these low NO<sub>x</sub> burners can be the most important component of the system because they provide more precise tuning and control of the combustion process across the firing range of the burner.

### **Cost Effectiveness of Rule Compliant Spray Booth Heating Systems**

NO<sub>x</sub> Emissions for most auto body spray booths average less than one half pound per day on an annual basis. NO<sub>x</sub> emissions contribute to the formation of secondary particulates in addition to ozone. A typical booths' annual average NO<sub>x</sub> emissions are less than one

third pound per day. However, during late fall and winter when PM 2.5 concentrations can be high, daily NO<sub>x</sub> emissions can be two to three times annual average emissions.

The cost difference between a new certified rule compliant heated spray booth and a new non-compliant unit is less than \$10,000 on typical new booth based on information from manufacturers, vendors and the cost of booths prior to rule adoption. The cost for new units includes markups from the booth manufacturer applied to the cost of the burner, gas train and control system. Most of the specialty booths used for applications other than auto body repair were tested with standard burners, so there was no additional equipment cost to comply with Rule 1147 limits. However, the cost for adding a new natural gas fired certified heating system to an existing spray booth varies from \$30,000 to \$50,000 with a typical cost of about \$40,000. The cost varies depending upon the manufacturer, type of booth and the individual installation.

The cost of new booths are highly variable depending upon the type of booth and options. According to vendor supplied information, the cost to purchase and install a new spray booth is about 20% higher than in 2008 when Rule 1147 was adopted. This increase is consistent with industry data on the cost to purchase and install new equipment (i.e., Marshall & Swift Equipment Cost Index which includes inflation, the cost of materials and manufacturing costs). The typical new installation is a semi down draft (side draft) booth with for about \$80,000. A new basic cross draft booth without recirculation is less and costs \$65,000 to \$80,000. However, some vendors do not sell heated cross flow booths. The heating system and installation cost of the booth and heating constitute most of the cost for a new basic cross draft booth. A new full down draft booth is about \$115,000 and up depending upon options. Although the cost for semi down draft and down draft booths are higher than for a basic cross draft, the heating system costs are about the same for basic and premium booths from the same manufacturer or vendor.

The cost effectiveness for a new SCAQMD certified low NO<sub>x</sub> auto repair booth is at most \$22,000 per ton  $[(\$10,000 \text{ at most}) / (70\% \text{ reduction in NO}_x) \times (0.25 \text{ lb/day} / 2000 \text{ lb/ton}) \times 260 \text{ days/year} \times 20 \text{ years}]$ . In higher volume shops, the cost effectiveness is better (lower than \$22,000/ton).

The cost to retrofit a used booth to install in the SCAQMD as a new permitted unit is significantly less than purchasing a new booth. However, the cost effectiveness for retrofitting an existing in-use auto repair booth with a SCAQMD certified heating system is \$88,000 per ton of NO<sub>x</sub> reduced based on a cost of \$40,000 and a 20 year life. The cost of the heating system ranges from \$30,000 to \$50,000. For a high volume booth used two shifts a day, the cost effectiveness could be less than half this value (\$44,000/ton). For a booth retrofit costing \$30,000 the cost effectiveness is \$66,000 per ton. This cost effectiveness of retrofitting an existing permitted booth is higher than the minor source average cost-effectiveness criteria of \$27,000 per ton used by SCAQMD for equipment without defined BACT. Depending upon the number of cars processed per day, the retrofit cost effectiveness may also be higher than the BACT incremental cost effectiveness criteria of \$81,000 per ton.

It must be noted that depending upon the age of the used booth, the owner may have to upgrade the booth to meet current building and safety codes. The local building and safety agency may require mechanical, electrical, fire safety and other components be upgraded or replaced. These costs are not attributable to Rule 1147 and are also not included in the cost effectiveness analysis for new, modified or relocated units that require a new SCAQMD permit. The SCAQMD BACT Guidelines does not include the cost of compliance with non SCAQMD regulations in the calculation of cost effectiveness. The calculation of cost effectiveness is an analysis of the cost of new equipment and the cost of operating the new equipment. In the cost effectiveness analysis for new rule requirements, the recurring costs for new or modified equipment are those above and beyond the costs associated with original existing equipment.

The cost effectiveness for upgrading existing spray booths to comply with the Rule 1147 emission limit exceeds the minor source cost-effectiveness criteria of \$27,000 per ton used by SCAQMD for equipment categories without a defined BACT. However, the cost effectiveness for new units is at most \$22,000 per ton and is less than the BACT Guidelines criteria. Because the cost effectiveness to retrofit an existing permitted booth is significantly higher than the minor source BACT criteria, staff is considering amending Rule 1147 to delay compliance for existing in-use permitted booths and heating units until they are modified (modification of the combustion or air circulation system), relocated (including moved to a different location within the facility) or replaced. Staff is proposing that new, modified, or relocated units requiring an SCAQMD permit continue to be required to comply with the Rule 1147 NO<sub>x</sub> limit at the time of modification or installation. A change of ownership in a business with an existing in-use permitted booth would be exempt from the retrofit requirement unless the booth or heating unit is modified, relocated or replaced.



## Appendix G – Crematories

## CREMATORIES

Twenty crematories have been tested and comply with the Rule 1147 NO<sub>x</sub> emission limit. This list includes units tested with their original burners and units tested after replacing their burners. The burners tested in these units are manufactured by Eclipse, Facultatieve and others. The most common burner installed for new units in the SCAQMD and for replacing old burners is the Eclipse Thermjet, a medium to high velocity burner used in many high temperature applications including kilns, metal melting, heat treating and burn off furnaces.

Crematories are constructed as two integrated chambers each with their own burners. The first chamber is used for incineration and the second is an afterburner for reducing emissions of PM, VOCs and odors. Typically both chambers use the same type of high temperature burner but the size and number of burners in each chamber may differ. The primary chamber typically has one or two smaller burners than the one burner used in the secondary chamber afterburner section.

The Rule 1147 NO<sub>x</sub> emission limit for crematories is 60 ppm. The NO<sub>x</sub> emission concentrations for the tested crematories average 50 ppm with a range from 30 to 59 ppm. The 20 crematory tests that have been reviewed and comply with the emission limit include those with original burners and many units with new burners and control systems. Many crematories more than 20 years old had burners that are no longer produced and would not comply with the Rule 1147 emission limit. However, those crematories replaced their burners and comply with the 60 ppm NO<sub>x</sub> emission limit. Most crematories less than 20 years old have been installed with burners that comply with the Rule 1147 NO<sub>x</sub> emission limit and will not require replacement a retrofit. These units will only be required to demonstrate compliance through an emissions test.

The Rule 1147 test program has demonstrated that the NO<sub>x</sub> emission limit of 60 ppm is achieved by the burners and combustion control system available since the late 1990s. Crematories that have had their burners replaced use the same burners that are installed in new units. The average emission concentration from the tested units is 50 ppm and some units are significantly lower.

## Appendix H – Fryers

## **FRYERS**

There are two major types of fryers – conveyor and batch type. In addition, there are different types of heating systems including immersion tube heating in conveyor units and external oil heating systems for many batch type fryers. The external oil heaters use a heat exchanger with a gas fired burner or another heat source such as a thermal fluid heater regulated by SCAQMD Rules 1146.1 or 1146.2. Both types of fryers and heating systems have been tested and comply with the rule 1147 emission limit.

Seven existing in-use fryers have completed emission testing and comply with the Rule 1147 NO<sub>x</sub> emission limit of 60 ppm. The tested units are from three different manufacturers. All units were tested with their original burner systems. One unit is a conveyor fryer with many small immersion tube burners and a total heat rating of 1.5 mmBtu/hour. The other units use single burners with a heat exchanger and have heat ratings from 1.5 to 2.5 mmBtu/hour. The average NO<sub>x</sub> emissions are about 30 ppm with a range from 14 ppm to 56 ppm.

A variety of systems from three different manufacturers have been tested and comply with the Rule 1147 NO<sub>x</sub> emission limit. The units complied with the 60 ppm using different types of heating systems. Based on the units completing testing, the Rule 1147 emission limit is achievable with the original heating systems installed for these fryers.

## Appendix I – Heated Process Tanks

## HEATED PROCESS TANKS

Heated process tanks, parts washers and evaporators are a category of 1147 equipment for which it is difficult to accurately estimate the number of units that are subject to Rule 1147. While evaporators and parts washers with an integrated heated tank are typically separate units with their own permit, most process tanks are permitted as part of a process line with other processes and tanks. Because Rule 1147 only applies to units that require a permit; an individual tank is only subject to Rule 1147 if it is heated by burners and either has emissions of VOC, PM or toxic air contaminants or the rating of the burner system is greater than two million BTU per hour (2 mmBtu/hour).

For example, tanks with mixing from an air sparging system are more likely to have VOC, PM or toxic emissions and require emission controls and a permit than those that do not. Otherwise a tank is exempt from the requirement for a permit as defined by SCAQMD Rule 219. However, if a process tank does not require a permit, it is still included in the description of a process line in order to provide a complete description of the process for SCAQMD permitting and compliance staff. Process lines are permitted as one unit in order to reduce the cost and administrative burden of permits.

There are approximately 1,400 process tanks identified in the SCAQMD permit system. About 1,200 of them are unheated, heated electrically or heated by a boiler. Of the remaining 200, at least 160 have burners rated less than the size requiring a permit. The number of heated process tanks subject to Rule 1147 is estimated to be between 20 and 40 with a best estimate of 25 units. The heat ratings of process tanks subject to Rule 1147 varies from 2.2 to 9 mmBtu/hour. Staff has also identified 23 evaporators with SCAQMD permits that are potentially subject to Rule 1147. There are also an unknown number of parts washers that are potentially subject to Rule 1147 depending upon their size, configuration and emissions. Tanks, evaporators and washers with electric, boiler steam or thermal fluid heating are exempt from Rule 1147. Equipment heated using a separate enclosed heated tank are potentially subject to SCAQMD Rules 1146, 1146.1 or 1146.2 which regulate boilers and enclosed process heaters.

Many heated process tanks, evaporators and parts washers use immersion heating tubes to heat a solution in a tank. Immersion tube burners fire into and heat a tube and that heat is transferred to the solution from the tube by conduction and convection. The efficiency of heat transfer depends upon the diameter and length of the tube. The efficiency of heat transfer in a tank system can vary from about 60% to over 90%.

To date only a few heated process tanks and evaporators have performed testing because some were installed within the last 15 years, others have emissions less than or equal to one pound per day and most are exempt because they do not require a permit. Seven units have been tested and reviewed by SCAQMD staff. None of these units replaced their burners. All tested units comply with the Rule 1147 NO<sub>x</sub> limit of 60 ppm for heated process tanks, evaporators and washers with their original burners.

Process tanks, evaporators and washers with their own burners use a variety of heat exchange systems to heat a solution or assist in evaporation. Most process tanks use a constant diameter tube to heat a solution. Evaporators either use custom designed air to solution heat exchangers or constant diameter tubes to provide heat to a solution. Most parts washers use a custom designed heat exchange system or a separate water heater.

Custom designed heat exchange systems have various configurations but start out with a combustion zone with a larger cross section than the remainder of the heat exchanger. These systems typically start with a combustion chamber that is about 8 to 16 inches across that extends the full length of the burner's flame. The combustion section of the heat exchanger is large because manufacturers use burners that are designed for a wide variety of applications including boilers, furnaces and ovens.

Emission testing has been performed on three evaporators using custom designed heat exchangers – two units from Encon using MidCo burners and one unit from Lakeview Engineering unit using a burner from Industrial Combustion. The heat input for these systems are 220,000 and 650,000 Btu/hour for the Encon evaporators and 1.5 mmBtu/hour for the unit built by Lakeview Engineering. NO<sub>x</sub> emission for these units ranged from 25 to 52 ppm.

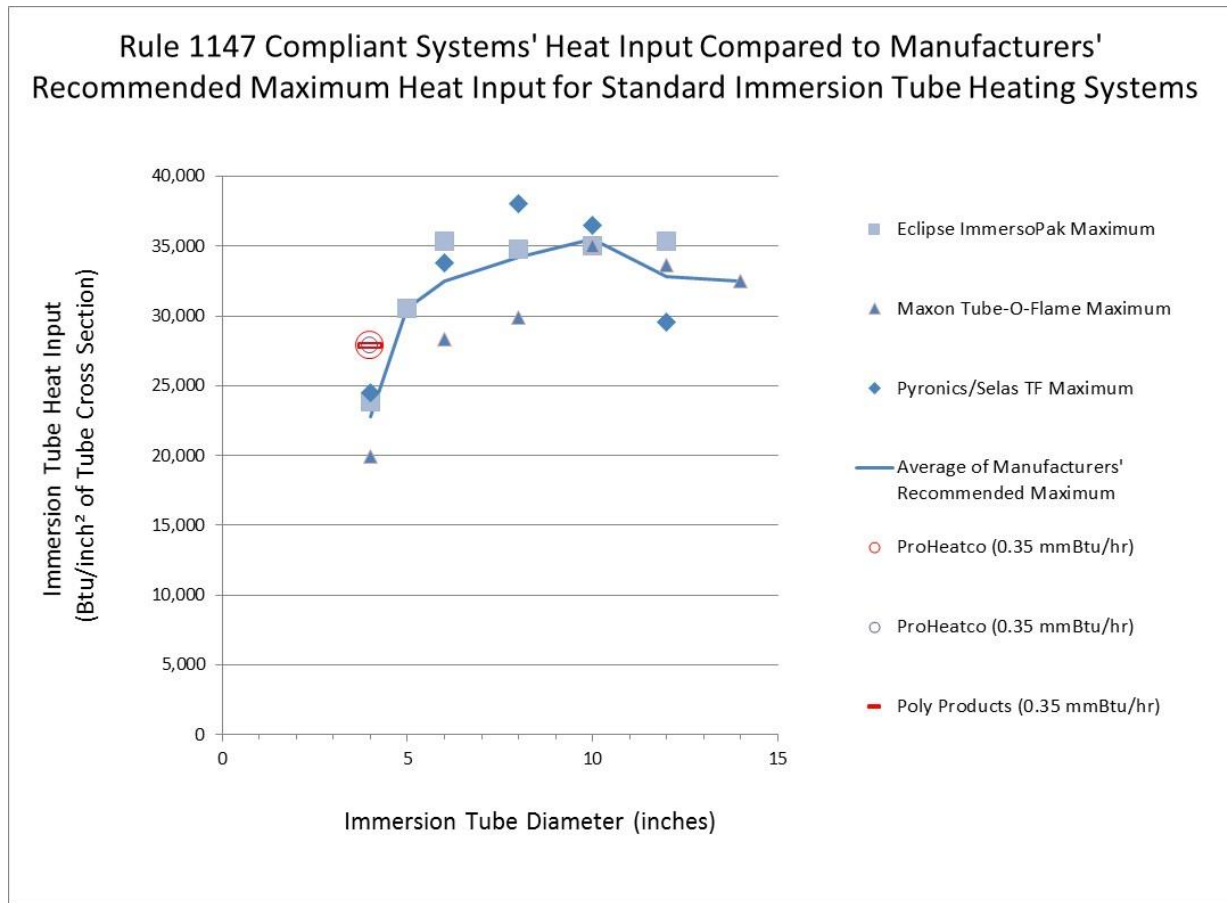
Most process tanks and some evaporators use a constant diameter tube system and immersion tube burners to heat the solution tank. However, there are three types of heat exchange systems using constant diameter tubes. Each system has its own range of tube diameter depending upon the amount of pressure the burner produces and the allowable heat input to an individual tube. In addition, burners for these systems can be set up in a variety of ways depending upon the type of process tank. Burners can be set to fire at a maximum firing rate and off, fire at a high and low rate or modulate and fire across the whole range of the burner. Burners can also be set to fire at a fixed amount of combustion air or variable amount of combustion air in order to maintain a constant ratio of fuel and air over the firing range of the burner.

The most common heating tube system typically has tubes that vary from about four inches up to 14 inches in diameter. Burners for this system are available from many manufacturers including Eclipse, Maxon, Sela/Pyronics and Titan Engineering. The heat input in this type of system varies from about 20,000 to 30,000 Btu per square inch of tube cross section in four and five inch tubes and 25,000 to 40,000 Btu per square inch in six to 14 inch diameter tubes. Three of these systems have been tested – two heated evaporator tanks from Proheatco and one heated evaporator tank from Poly Products. All of these systems use a burner with a maximum rating of 350,000 Btu/hour and 4 inch diameter heating tubes. NO<sub>x</sub> emissions from these three units vary from 30 to 55 ppm. In addition, preliminary testing of a unit at another facility with a higher output burner of about 3 mmBtu/hour indicates that unit has NO<sub>x</sub> emissions of 40 to 50 ppm.

Figure I-1 provides a summary of burner and tube characteristics of the three tested units from Proheatco and Poly Products. The figure illustrates that the units have firing rates (heat input per square inch) near the maximum recommended by three major manufacturers

for the most common type of tube immersion tube heating burners. This metric is important because it impacts the formation of NO<sub>x</sub> in the heating tubes. The information presented in Figure I-1 and the emission test data indicate that it is technically feasible to comply with the Rule 1147 NO<sub>x</sub> limit with the most common type of immersion heating burners.

Figure I-1



A second type of tube heating system uses burners that produce higher pressures and can fire into smaller diameter tubes. This type of system uses tubes two to eight inches in diameter with heat inputs per tube cross sectional area double the heat inputs of the standard system discussed above. Eclipse, Maxon and PowerFlame manufacture burners for this type of application. There are currently no emission test results available for these types of burners so it is not possible to determine if they comply with the Rule 1147 NO<sub>x</sub> emission limit of 60 ppm.

A third type of tube heating system for process tanks has been installed in new heated tanks. This system has a new type of burner from Maxon (an XPO burner) that requires larger diameter tubes (14 inches and above). An SCAQMD approved emissions test on one of these systems (required for Regulation XIII and new source review) with a 3.3 mmBtu/hour burner showed emissions of 4 ppm NO<sub>x</sub> at high fire and 34 ppm at low fire.



The Rule 1147 testing program has identified three types of heating systems used in process tanks and evaporators that comply with the NO<sub>x</sub> emission limit. There is no information yet available for a fourth type of heating system that uses high pressure burners firing into smaller diameter tubes of 2 to 8 inches. A fifth type of tank heating system with tube firing burners used in heat treating also been demonstrated to meet the 60 ppm NO<sub>x</sub> limit but have not yet been tested in heated tank applications.

For all five types of tank heating systems, the burners and heat exchangers or tubes are designed as one integrated system. If an individual heated tank or evaporator system using any of the four systems does not comply with the emission limit, then the whole tank will likely have to be replaced. Delaying compliance for existing in-use units from the rule emission limit until the combustion system is modified or replaced will address the issue that it is not feasible to retrofit an existing heated tank with different burners. If a tank is retrofitted with new burners, the owner will replace the heating tubes or heat exchanger. If the owner rebuilds a process tank, then a rule compliant system can be installed at that time.

SCAQMD staff is considering to amend Rule 1147 to delay compliance with the NO<sub>x</sub> emission limit for existing in-use process tanks, evaporators and parts washers with an integrated heated tank until the combustion system is modified or replaced. New units would still be required to meet the emission limit unless the total unit heat rating is less than or equal to 325,000 Btu/hour. Staff estimates this change would affect less than 50 heated tanks and evaporators currently subject to the Rule 1147 emission limit. There are more than 1,200 process tanks which are not subject to Rule 1147 requirements because they are exempt from the requirement for a permit by SCAQMD Rule 219, are unheated or are heated electrically or with a boiler.

## Appendix J – Heat Treating

## HEAT TREATING

Heat treating typically involves heating metals or alloys in a furnace or oven in order to develop specific properties in the metal or alloy before and after a part is made. However, heating can also be used to treat metals and nonmetallic refractory materials in a manufactured vessel, furnace or other product using temporary burners systems. The burners used in these systems are the same kinds of burners used in direct fired heat treating furnaces and kilns. Kilns are used for heat treating products made from ceramics, clay and other non-metallic materials.

Metal heat treating temperatures vary from a few hundred degrees Fahrenheit, used in tempering, to over 2,100 degrees for forging steel and titanium. With the exception of tempering, steel and titanium alloy heat treatments are typically at higher temperatures than for non-ferrous alloys based on aluminum. Kilns processing non-metallic materials also vary temperature depending upon the material and final product.

The type of burners used for heat treating depend upon the temperature required and whether they fire directly into the furnace or into tubes and heat is then transferred from the tubes to the furnace by fans. Lower temperature heat treating ovens have burners that are typically found in other types of ovens including air heating burners such as Eclipse Winnox and Maxon Cyclomax burners. Higher temperature direct fired furnaces typically use a different type of burner with a higher flame velocity, longer flame length and more radiant heat output for heating refractory material in the furnace or the tubes they fire into. High velocity burners are also used because they increase mixing and eliminate temperature stratification in direct fired furnaces. The new control systems for these low NO<sub>x</sub> burners are an important component of the system because they provide more precise tuning and control of the combustion process across the firing range of the burner.

Indirect fired furnaces typically have specialized tube firing burners. However, high velocity burners, similar to those found in direct fired applications, have also been used in indirect fired furnaces permitted in the SCAQMD. Temperature stratification in indirect fired furnaces is avoided because large fans move the air in the furnace past the tubes and into the section where the material being treated is held. High velocity and tube firing burners are available from many manufacturers including North American/Fives, Bloom, Eclipse, Maxon, Hot Work, Hauck, Industrial Combustion, and Selas. Tube firing burners from a number of manufacturers including Bloom, Hauck, North American/Fives, and Eclipse also have an option to add flue gas recirculation (FGR) to reduce NO<sub>x</sub> emissions.

Heat treating furnace designs have evolved over time. Newer furnace designs have more and smaller burners than many earlier designs. For both direct and indirect fired furnaces, more burners provide better control of the temperature profile in the furnace. Finer control of the furnace temperature allows the operator to meet newer more stringent temperature uniformity requirements than those that were in existence when older furnace designs were first built. Some of the older furnace designs predate modern temperature uniformity standards developed since the 1970s. The number and type of burners used in a furnace

depend upon the size of the furnace, type of heat treating, process temperature and temperature uniformity requirements of the heat treating processes performed by the furnace.

Figures J-1 to J-4 summarizes the size and number of burners in the heat treating furnaces that have successfully completed emission testing. This information indicates that most of the burners used have heat ratings of 0.5 mmBtu/hour (500,000 Btu/hour) or less and the largest burners are about 2 mmBtu/hour. The largest furnaces have a heat rating of about 8 mmBtu/hour. There are furnaces permitted in the SCAQMD with larger heat ratings, but they are found at facilities in the RECLAIM program and are exempt from Rule 1147.

Figure J-1

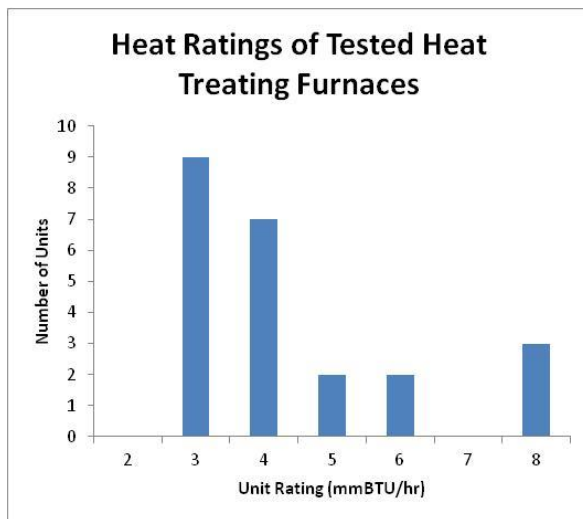


Figure J-2

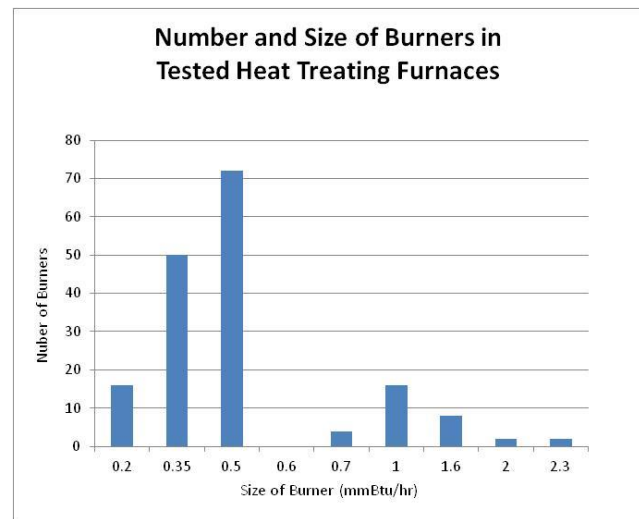


Figure J-3

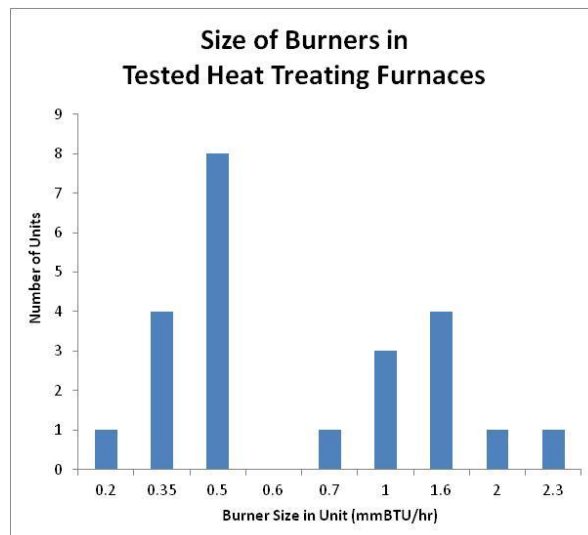
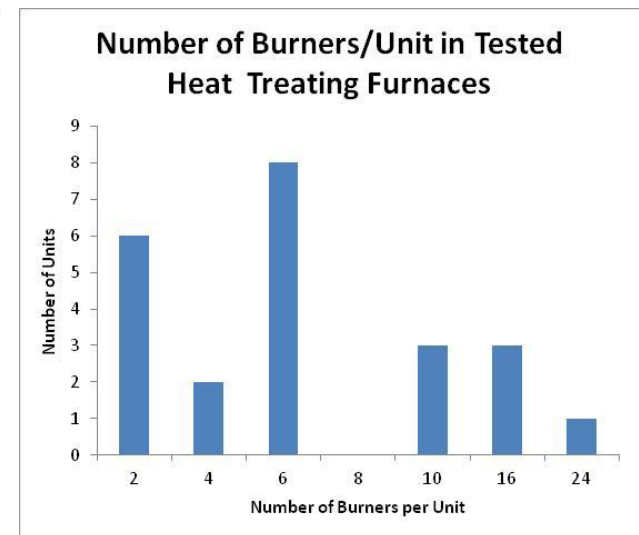


Figure J-4



The emission test results for heat treating furnaces indicate most furnace NO<sub>x</sub> emission concentrations are in the range from 45 ppm to 55 ppm with an average of about 50 ppm. These results cover a variety of furnaces processing aluminum and steel alloys across a broad temperature range. Some of the furnaces were new and were required to meet the new source BACT requirement of 50 ppm NO<sub>x</sub>, but most have been in use long before Rule 1147 was adopted in 2008 and before the BACT limit of 50 ppm was put in place in 2000. To date, only a few furnaces have had their burners replaced, added an FGR system or replaced their furnace in order to comply with Rule 1147. Most heat treating furnaces tested have met the Rule 1147 emission limit with their existing burners.

Kilns use the same burners that are found in direct fired heat treating furnaces and crematories. Kilns are used to heat treat clay, ceramic and other nonmetallic materials. Kilns are also used to heat treat glazes and other coatings applied to products made from these materials. Rule development staff have not yet received new emission test results for kilns from the Rule 1147 testing program. However, there were a number of emission tests completed on small and large kilns prior to rule adoption in 2008 and the rule amendment in 2011. These test results are summarized in Appendix B of this document. The emission test results demonstrate that a variety of kilns comply with the Rule 1147 emission limit of 60 ppm NO<sub>x</sub> with the burners installed prior to rule adoption. In addition, many small kilns are not subject to Rule 1147 because they are exempt from the requirement for a permit under SCAQMD Rule 219 (some of these use electric heat).

## Appendix K – Metal Melting

## METAL MELTING

A variety of metal melting furnaces are subject to Rule 1147. They include small pot and crucible furnaces for melting lead, lead alloys, aluminum, zinc and zinc alloys and larger units including kettle furnaces for galvanizing and reverberatory furnaces for melting aluminum. There are about 170 metal melting furnaces potentially subject to Rule 1147 NOx emission limits. Most of the furnaces subject to Rule 1147 melt non-ferrous metals and alloys. Furnaces for melting iron or making steel are often electric and therefore not subject to Rule 1147. There are also many furnaces at large facilities which are exempt from Rule 1147 because the facility is in the RECLAIM program.

To date, most of the metal melting furnaces tested complied with the Rule 1147 NOx limit with the burners in place when the rule was adopted. All of the larger kettle and reverberatory furnaces passed the emission limit with their original burners. However, one kettle furnace and one reverberatory furnace were recently built to replace older units and were subject to BACT under new source review. The four larger furnaces whose permits identified the burner manufacturer had Eclipse burners.

Of the five small pot and crucible melting furnaces tested, three furnaces met the emission limit with their original burners. The other two units had their burners replaced before testing. This type of furnaces can be built with burners from many manufacturers including Eclipse, Maxon, MidCo and others. One pot furnace had its original burner replaced with an Eclipse Ratio Air burner in order to comply with the NOx emission limit of 60 ppm. The new burner also had low CO emissions. A second company chose to replace two burners on a large pot furnace (2 mmBtu/hour originally) with one larger 2.4 mmBtu/hour Maxon Kinedizer LE burner, but it is not known whether the original burners would have met the Rule 1147 NOx limit. The burners were replaced in order to increase production of the furnace and to reduce fuel consumption and emissions. The new configurations was subject to BACT under new source review and complies with the Rule 1147 NOx emission limit and has low CO emissions.

The heat ratings of the pot/crucible furnaces tested ranged from 0.5 - 2.4 mmBtu/hour. The NOx emissions for these pot/crucible furnaces were in the range of 49 to 60 ppm. The eight kettle and reverberatory furnaces have unit heat ratings from 1.2 – 6 mmBtu/hour with emission ranging from 40 ppm to 53 ppm. However, the units greater than 4 mmBtu/hour have multiple burners rated 1.2 – 1.5 mmBtu/hour. The highest heat rating for a unit with one burner is 2 mmBtu/hour. There are furnaces with larger heat ratings permitted in the SCAQMD, but they are at facilities in the RECLAIM program and are exempt from Rule 1147.

The eight metal melting furnaces tested complied with the Rule 1147 NOx emission limit. Two of the units were new and built to replace old units. It is not known whether the old units would comply with the emission limit. One pot/crucible furnace was rebuilt with a larger burner to increase capacity. Another small pot furnace had its burner replaced to

comply with the Rule 1147 NOx emission limit. All of the unmodified units, the new units and the units with replaced burners complied with the rule emission limit.



## Appendix L – Multi-chamber Burn-off Ovens and Incinerators

## **MULTI-CHAMBER BURN-OFF OVENS AND INCINERATORS**

This category includes various equipment that are used for similar purpose but named differently. These units may be called burn-off or burn-out ovens, kilns or furnaces and incinerators. However, all of the units perform a similar function and operate in a similar fashion. They are built with a primary chamber for melting, vaporizing or pyrolyzing some material on a part or piece of equipment in order to recycle the material or component. Some units are used for incinerating material that cannot be reclaimed or must be incinerated prior to disposal. The primary chamber leads to an integrated secondary afterburner chamber that destroys particulate matter, carbon monoxide, VOCs and any other organic material that enter this afterburner section. The incinerated material is reduced to carbon dioxide and water vapor.

The Rule 1147 NO<sub>x</sub> emission limit for the primary chamber of a furnace depends upon the process temperature in this burn-off chamber. If the process temperature exceeds 800 °F, then the NO<sub>x</sub> emission limit in the primary chamber is 60 ppm. If the process temperature is lower, then the NO<sub>x</sub> limit is 30 ppm which is consistent with a typical oven or low temperature furnace operating at those temperatures. The NO<sub>x</sub> limit for the secondary afterburner chamber is 60 ppm NO<sub>x</sub> and the same as for other afterburners.

Twelve burn-off ovens, furnaces and incinerators have completed review of their test results. Most units were tested with original burners. The number of burners in these units varies from two to six burners and the most common configuration has two or three burners. The heat ratings of the units range from 0.5 to 2.2 mmBtu/hour. The average NO<sub>x</sub> concentration in the stack after the afterburner section is less than 45 ppm and the range is from 26 to 54 ppm.

Discussion with a local manufacturer of burn-off furnaces indicates that it is not possible to use the preferred type of burner and meet a 30 ppm emission limit in the primary chamber for a process temperature less than 800 °F. The typical burner that is used to remove materials from a part is the same type of high temperature medium to high velocity burner used in crematories, kilns, heat treating and some types of afterburners. These burners are designed to have NO<sub>x</sub> emissions in the 40 to 60 ppm range.

The manufacturer has tested a design with an air heating burner in the afterburner section to achieve emissions of less than 30 ppm in the secondary chamber and meet an average emission limit for the two chambers of less than 45 ppm NO<sub>x</sub>. However, this redesign will not achieve the required PM, VOC and carbon monoxide reductions in all applications. In addition, using the averaging provision of the rule may not always achieve compliance with the NO<sub>x</sub> limit. Company representatives have suggested that since it is not always possible to comply with the emission limit of 30 ppm in the primary chamber of these types of devices, the NO<sub>x</sub> limit in the primary chamber should be 60 ppm NO<sub>x</sub> regardless of the process temperature.

SCAQMD staff agree with this assessment and are considering a rule change that the NO<sub>x</sub> emission limit in both chambers of this type of equipment should be 60 ppm at any process

temperature. This change will also be considered for similar processes that use the same types of burners. This change in the rule limit would affect a small number of equipment regulated by Rule 1147.

## Appendix M – Ovens and Dryers

## OVENS AND DRYERS

Excluding spray booth systems, the number of ovens and dryers under permit in the SCAQMD is slightly less than 1,200 units. This is the second largest category of equipment regulated by Rule 1147. These units are used in a variety of processes including curing of coatings and other materials, drying coated and printed products, and drying materials. The oven or dryer can be a small enclosed batch oven with a heating system, a large walk in oven, a conveyor system with a coating tank or coating spray station followed by a heated oven, or a drying room with a unit heater. Some printing and all textile drying operations use large conveyor units with multiple burners for high speed production of large quantities.

There are a variety of burners used in ovens and dryers. Each type of burner has its own characteristic emission profile. For example, radiant infrared burners have low emissions and NO<sub>x</sub> concentrations are typically less than 20 ppm. The most common type of burners used are nozzle mixing air heating burners. Some of the same types of ovens use premix burners with a metal fiber fabric cylinder or panel as a flame holding surface. Other units are designed to use line type air heating burners. Some small ovens and large conveyor systems use many flat panel radiant infrared burners. Powder coating operations are one of the processes that use radiant burners. Radiant infrared burners are required to directly heat a part in order to melt and then cure the coating. Ovens in which combustion gases cannot come in contact with the produce use indirect fired heater units with an air to air heat exchanger to provide clean heated air to the oven. However, both direct and indirect-fired unit heaters can be used to provide heat and move air through large drying ovens or rooms.

Ovens subject to the Rule 1147 NO<sub>x</sub> emission limit use burners from a number of manufacturers. The most common burners used in the SCAQMD are line and nozzle mix burners manufactured by Eclipse and Maxon. Two thirds of the tested ovens and dryers use Maxon burners and one fourth of the units use Eclipse burners. Eclipse burners used in compliant ovens and dryers include the Eclipse Winnox and Linnox product lines. Maxon burners used in compliant ovens include several versions of the OvenPak series, the Cyclomax, the LN-4 line burner and the Kinedizer. However, low NO<sub>x</sub> burners from other manufacturers including MidCo, PowerFlame, Riello, and Yukon also comply with the Rule 1147 NO<sub>x</sub> emission limit. The newer control systems for these low NO<sub>x</sub> burners are the most important component of the combustion system because they offer more precise tuning and control of the combustion process across the firing range of the burner.

Most ovens and dryers tested use only one burner. However, coating, printing and curing lines often have multiple burners. Many coating and printing lines use two identical burners, but the oven section of a coating line can also have up to 40 infrared radiant panels.

The tested ovens' heat ratings varies across a wide range from 0.4 mmBtu/hour for a small batch oven up to 20.5 mmBtu/hour for a large rotary dryer. However, most ovens have ratings less than 2.5 mmBtu/hour. Most burners in ovens with multiple burners are also

less than 2.5 mmBtu/hour. The most common size of burner installed in all types of oven is 1.0 mmBtu/hour.

Figures M-1 through M-4 identify burner heat rating, number of burners and the range of the heat ratings for the tested units. Printing oven and textile dryer data is not included in Figures M-1 and M-2. Printing oven data is summarized in Figures M-3 and M-4.

Figure M-1

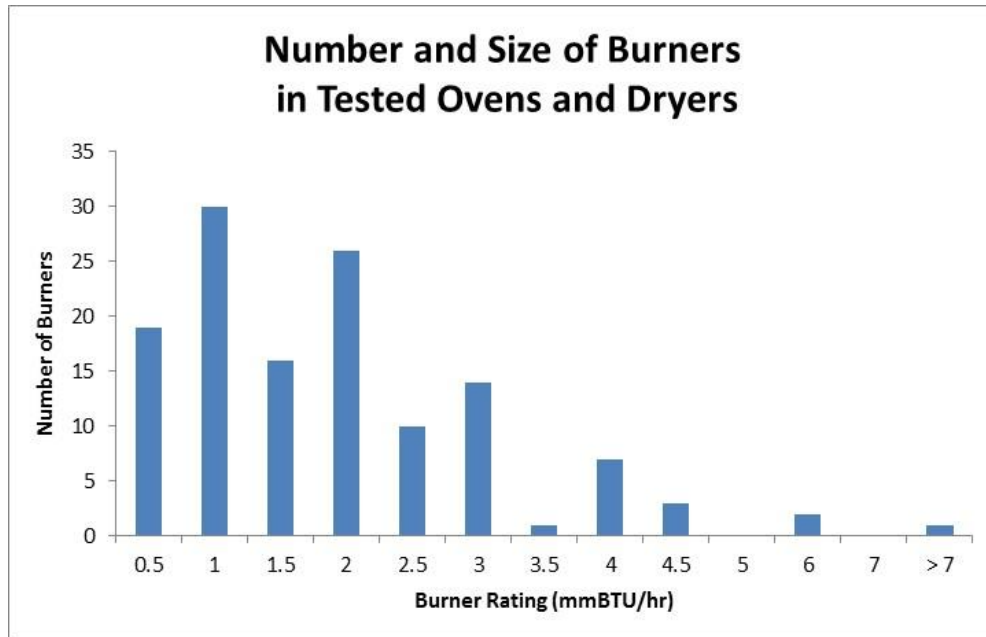


Figure M-2

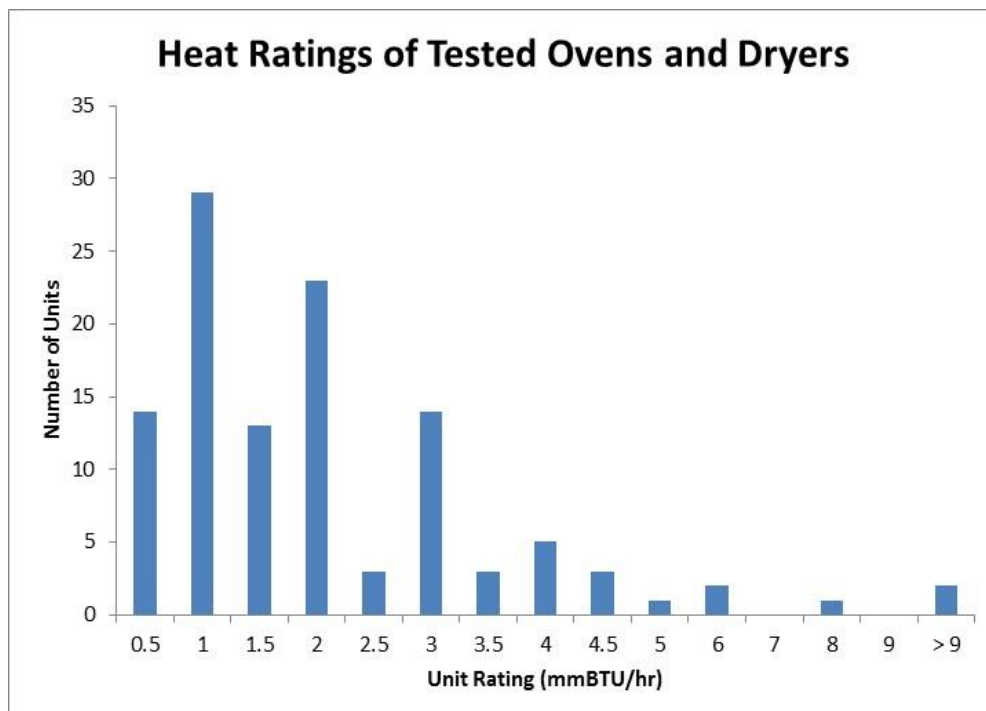


Figure M-3

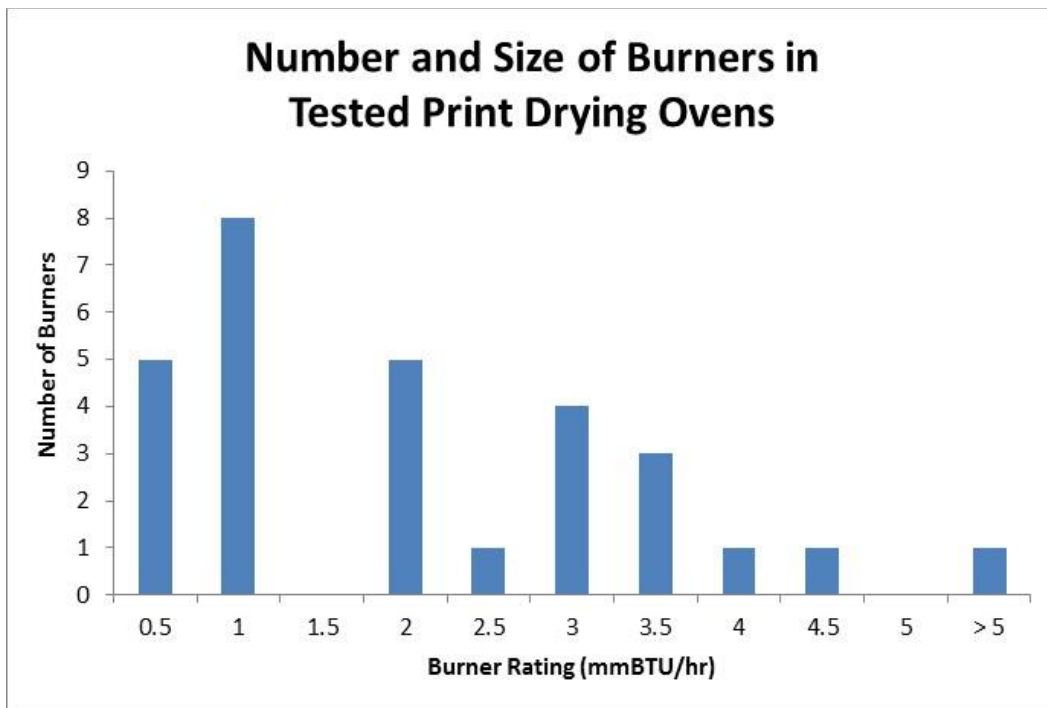
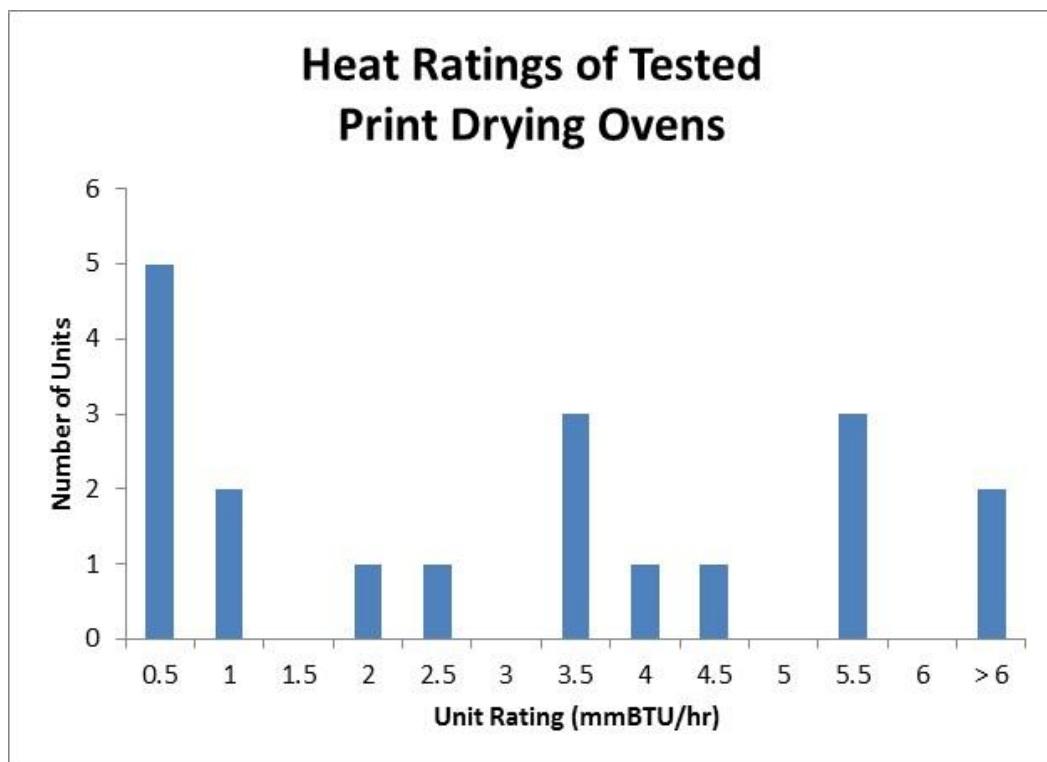


Figure M-4



Printing oven and dryer heat ratings vary from about 0.4 mmBtu/hour to 7.4 mmBtu/hour. The most common burner size in these ovens is also 1.0 mmBtu/hour. Textile tenter dryers

typically have eight or nine burners that are rated less than 1.0 mmBtu/hour. The other type of textile dryer typically has four burners each rated about 1.0 mmBtu/hour.

The emission test results for ovens and dryers indicate that all types of units tested comply with the Rule 1147 NO<sub>x</sub> emission limit. Table M-1 provides a summary of the completed Rule 1147 emission tests for ovens and dryers. At this time, 140 units used for a variety of processes have approved test results and comply with the 30 ppm NO<sub>x</sub> limit. The average emission concentration for most ovens and dryers is about 20 ppm NO<sub>x</sub>. The average emission concentration for textile dryers is about 25 ppm NO<sub>x</sub>. The range of emission concentrations for all ovens and dryers is from 4 ppm to 30 ppm. The range of emission concentrations for printing lines and ovens is 4 ppm to 29 ppm and for textile dryers is 14 ppm to 27 ppm. In addition, two ovens complied with the rule limit by averaging emissions from the oven and an afterburner that must comply with a NO<sub>x</sub> emission limit of 60 ppm.

Table M-1  
Rule 1147 Emissions Test Results for Ovens and Dryers

Equipment Category	Rule 1147 NO <sub>x</sub> Limit (ppm <sup>1</sup> )	Number of Units Tested at Normal/High Fire	Average NO <sub>x</sub> Concentration at Normal/High Fire (ppm)	Number of Units Tested at Low Fire	Average NO <sub>x</sub> Concentration at Low Fire (ppm)
Oven/Dryer	30 or 60 <sup>2</sup>	112	20	35	21
Print Dryer/Oven	30	19	20	4	23
Textile Shrink Dryer	30	2	24		
Textile Tenter Dryer	30	4	23	4	26
Unit Heater	30 or 60 <sup>2</sup>	3	20	1	13
<b>Number of Units</b>		140		44	

<sup>1</sup> The Rule 1147 NO<sub>x</sub> limit is based on a reference level of 3% oxygen (O<sub>2</sub>) in the exhaust. All emission test results are converted to a concentration in parts per million at the reference level of 3% O<sub>2</sub>.

<sup>2</sup> The emission limit depends upon the process temperature.

The results from the Rule 1147 emission testing program indicate that rule compliant technology is available for ovens and dryers from many sources. In addition, all of the types of ovens and dryers under permit in the SCAQMD can comply with the Rule 1147 NO<sub>x</sub> limit. However, there is a lower limit on the availability of low NO<sub>x</sub> burners for ovens and dryers. The smallest low NO<sub>x</sub> burners available are rated 0.4 and 0.5 mmBtu/hour (400,000 and 500,000 Btu/hour). Burners in this size are available from a number of manufacturers including Eclipse, Maxon, MidCo and PowerFlame. For lower firing rates, oven manufacturers will use this size of burner but limit the firing rate to less than the burner's maximum capacity. If these burners must regularly operate at less than 30% of the maximum firing rate, it may be difficult to comply with the NO<sub>x</sub> emission limit. Because there is a lower limit on the size of compliant burners that can achieve 30 ppm NO<sub>x</sub> for ovens and dryers, staff is considering an exemption from the Rule 1147 NO<sub>x</sub> emission limit for units with heat input capacities less than 325,000 Btu/hour. Based on comments received from stakeholders, staff will also consider an alternative higher emission limit of 60 ppm NO<sub>x</sub> for these small burners.



## Appendix N – Food Ovens

## FOOD OVENS

Food ovens in use at the time SCAQMD Rule 1153.1 was adopted are no longer subject to Rule 1147. However, new food ovens are currently subject to Rule 1147 requirements. Staff are currently evaluating alternative rule development options for exempting new food ovens from Rule 1147. Although new food ovens may be exempt from Rule 1147 in the future, some operators of food ovens have reported results under the rule's emission testing program. At the time of this report, 13 food ovens used for a variety of baking and cooking operations have completed testing under the Rule 1147 program.

These ovens use burners from many manufacturers including Eclipse, Ensign/Selas, Flynn, Maxon and Weishaupt. Eclipse, Maxon and Weishaupt burners air heating burners are used in both batch and conveyor type convective ovens. Ensign and Flynn provide ribbon burners for heating specific types of conveyor ovens and some small batch ovens. For example, conveyor ovens with moving bands that must be heated in order to cook products on the band such as chips and crackers require ribbon or a similar type of burner. Batch type convective ovens can use a variety of burners and do not require ribbon burners. In addition, there are many conveyor type convective ovens that do not require or use ribbon burners. These convective batch and conveyor ovens use air heating nozzle mix or line burners.

Radiant infrared burners are used in both batch and conveyor ovens. This type of burner is available from many manufacturers including those identified earlier in this discussion. Three bakery ovens using only radiant infrared burners were tested and complied with Rule 1147 and Rule 1153.1 emission limits. This type of burner is used in both batch type and conveyor type ovens. The average NO<sub>x</sub> emission concentration for these burners is 13 ppm with a range of 6 to 19 ppm. Ovens with radiant infrared burners are exempt from the Rule 1153.1 requirement to perform an emissions test because these burners have NO<sub>x</sub> emissions significantly less than the emission limits in the rule (40 and 60 ppm NO<sub>x</sub>).

Four ovens with ribbon burners have been tested through the Rule 1147 emission testing program. Two baking ovens with operating temperatures less than 500 °F both had NO<sub>x</sub> emission concentrations of 21 ppm at their high or normal fire rate. One had NO<sub>x</sub> emission concentrations of 26 ppm at low fire. One of the units is used for baking tortillas and the other unit is used for baking breads and snacks. In addition, two griddle ovens used for making English muffins and other products cooked in griddles had emission concentrations of 41 ppm and 45 ppm. Griddle ovens with ribbon burners typically operate at temperatures above 500 °F. Both of these ovens comply with the Rule 1153.1 NO<sub>x</sub> emission limit of 60 ppm for this process temperature.

Five convection type ovens using nozzle mix air heating burners have been tested and comply with Rule 1147 and 1153.1 NO<sub>x</sub> emission limits. Two of the ovens are used to cook meat products and three cook breads and snacks. These ovens have average emission concentrations of 25 ppm NO<sub>x</sub> with a range of 22 ppm to 30 ppm. One of these units has a permit limit of 25 ppm NO<sub>x</sub> that was established prior to adoption of Rule 1147. This

oven has been operating for more than seven years with this permit condition and demonstrates that a 25 ppm NO<sub>x</sub> emission limit is achieved in practice for convection ovens.

The remaining oven that was tested is used for cooking meat and has two cooking sections. The first section is a charbroiler and the second is a convective heating section using steam and heated air. The heated air in the second section is produced using an Eclipse Air Heat line burner. The NO<sub>x</sub> emission concentration from all burners for this unit was 33 ppm. This result demonstrates compliance with Rule 1153.1 NO<sub>x</sub> emission limits of 40 ppm and 60 ppm. However, given the design and purpose of this unit, the first section of this device is exempt from the emission limits of Rules 1147 and Rule 1153.1 because it is a charbroiler. The exemption for charbroiling in both Rules 1147 and 1153.1 was not taken into account when the emission test protocol was prepared for this unit.

The results for the 13 food ovens tested through the Rule 1147 program indicate that every type of food oven and burner comply with Rule 1153.1 NO<sub>x</sub> emission limits. In addition, convection ovens using air heating burners, ovens with radiant infrared burners and conveyor type food ovens with ribbon burners operating at less than 500 °F also comply with the Rule 1147 NO<sub>x</sub> emission limit of 30 ppm. Moreover, another conveyor oven with ribbon burners and a process temperature less than 500 °F was tested prior to Rule 1147 adoption and had NO<sub>x</sub> emissions of less than 30 ppm (Figure B-5, Appendix B).

Currently, there are projects funded by SEMPRA Energy and the California Energy Commission to reduce NO<sub>x</sub> emissions from ribbon burners used in commercial and residential cooking ovens. The data from the Rule 1147 and Rule 1153.1 emissions testing programs and these technology projects will provide staff with data to determine how Rule 1147 and Rule 1153.1 should be amended in the future to limit NO<sub>x</sub> emissions from new food ovens.

Appendix O – ETS, Inc. Independent Technical Review of SCAQMD  
Draft Technology Assessment for Small and Low Emission Sources –  
Regulated by SCAQMD Rule 1147 (NO<sub>x</sub> Reductions from  
Miscellaneous Sources)

**ETS, INC.**

**INDEPENDENT TECHNICAL REVIEW OF SCAQMD  
DRAFT TECHNOLOGY ASSESSMENT FOR SMALL  
AND LOW EMISSIONS SOURCES – REGULATED BY  
SCAQMD RULE 1147 (NO<sub>x</sub> REDUCTIONS FROM  
MISCELLANEOUS SOURCES)**

**FINAL REPORT  
OCTOBER 26, 2016**

**SCAQMD CONTRACT NO. 16398  
ETS, INC. CONTRACT # 16-2350-C**

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## **I. EXECUTIVE SUMMARY**

South Coast Air Quality Management District (SCAQMD) Rule 1147 – NO<sub>x</sub> Reductions from Miscellaneous Sources was adopted by the SCAQMD Governing Board on December 5, 2008 for the purpose of reducing NO<sub>x</sub> emissions from a wide variety of combustion sources. Rule 1147 affects new and existing (in-use) combustion equipment requiring permits that is not regulated by other SCAQMD NO<sub>x</sub> rules and incorporates the following two control measures of the 2007 Air Quality Management Plan (AQMP): 1) CMB-01 – NO<sub>x</sub> Reductions from Non-RECLAIM Ovens, Dryers and Furnaces and 2) MCS-01 – Facility Modernization. SCAQMD Rule 1147 has been identified as an important component of the attainment strategy to meet both the federal annual PM<sub>2.5</sub> ambient air quality standard and the federal 8-hour ozone standard.

Rule 1147 was amended by the SCAQMD Governing Board on September 9, 2011 and included a requirement for SCAQMD Staff to perform an updated technology assessment for combustion equipment with NO<sub>x</sub> emissions of one pound per day or less. Also, at the September 9, 2011 Governing Board Meeting Staff proposed to hire an independent third party to review, discuss with Stakeholders, and provide comments on the Technology Assessment. A Request for Proposals (RFP # P2016-22) titled “Technical Review of Rule 1147 Technology Assessment for Small and Low Emission Sources” was released by SCAQMD on April 1, 2016 with a proposal due date of May 5, 2016. The purpose of the RFP was to solicit qualified firms to review and provide comments on the SCAQMD Draft Technology Assessment of small and low emission combustion equipment regulated by SCAQMD Rule 1147.

ETS, Inc. (ETS), an independent air emissions control consulting firm, submitted a proposal in response to RFP # P2016-22 and was notified as being selected for contract award in June 2016. The primary focus of the ETS review, as described in the scope of work, was to review and provide comments on SCAQMD Staffs’ Draft Technology Assessment for Rule 1147 Small and Low Emission Sources that was released for public review on January 29, 2016. The purpose of the SCAQMD assessment was to evaluate the technical feasibility of retrofitting small and low emission units to comply with Rule 1147 NO<sub>x</sub> emission limits and the cost and cost effectiveness of replacing heating systems in those units for the categories of Rule 1147 equipment that were not addressed through amendment of Rules 219 and 222 and adoption of Rule 1153.1.

The ten major categories of equipment that were identified in the Draft Technology Assessment and evaluated by ETS were: 1) afterburner technologies, 2) spray booths, 3) crematories, 4) fryers, 5) heated process tanks, 6) heat treating, 7) metal melting furnaces, 8) multi-chamber burn-off ovens and incinerators, 9) ovens and dryers, and 10) food ovens. Some of the processes utilizing the above equipment and regulated by Rule 1147 were described as including, but not limited to, coating, printing, textile processing, material processing, and manufacturing using wood, plastics, ceramic and metal materials.

After ETS conducted the initial review of the February 2016 Draft Technology Assessment, a Rule 1147 Task Force meeting was scheduled for August 3, 2016 at SCAQMD headquarters. The purpose of the meeting was as follows:

- Introduce ETS to SCAQMD Staff, Rule 1147 Task Force members, and Stakeholders
- Receive input from the Stakeholders on SCAQMD's Draft Technology Assessment which was released for public review on January 29, 2016
- Discuss the future activities and schedule for Rule 1147

Subsequent to the Rule 1147 Task Force Meeting, Stakeholders were given a deadline of August 23, 2016 to submit all inputs, data, comments, and/or concerns to ETS for independent review. ETS received information from the Stakeholders between August 3, 2016 and the August 23, 2016 deadline. All of the information received came from the following three Stakeholders: 1) Furnace Dynamics, Inc., 2) Industrial Process Equipment, Inc., and 3) Wirth Gas Equipment, Inc. ETS identified the information received from the three Stakeholders as nine distinct item numbers (Item #'s 1-9) by the date received. Additionally, two undated items and a third item were received after the August 23, 2016 deadline (Item #'s 10-12) from Industrial Process Equipment, Inc. and Furnace Dynamics, Inc.

The first category of comments received from the Stakeholders dealt with the availability of low NOx replacement burner technology for a specific application within the heated process tanks, evaporators and parts washers' equipment category. Similar comments were received from all three Stakeholders regarding a specific parts washer application within that equipment category, which was one of the ten major categories of equipment identified in the Draft Technology Assessment. The second category of comments from one Stakeholder was regarding the methodology of the cost effectiveness analysis. A third category of Stakeholder comments received by ETS included copies of comments that were indicated as being submitted directly to SCAQMD Staff prior to the release of the solicitation for third-party review; however, many of the comments were not explicitly applicable to the review of the February 2016 Draft Technology Assessment Rule for 1147 Small and Low Emission Sources. Those Stakeholder comments were related to topics such as Rule 1147 compliance activities or past rule development and potential future rule amendments.

The ETS comments on the burner technology review and the cost and cost effectiveness data and analysis conducted in the Draft Technology Assessment are included in this report. Comments received from the three Stakeholders during this project have also been addressed with ETS responses. In consideration of the Stakeholder comments received and based upon a detailed review of the February 2016 Draft Technology Assessment for Rule 1147 Small and Low Emission Sources, ETS concurs with the five recommendations that were presented in SCAQMD Staff's assessment. The five recommendations by equipment category for Rule 1147 may be found in Table ES-1 along with the following additional recommendation by ETS:

Change the NOx emission limit from 30 ppm to 60 ppm in the afterburner technologies equipment category for processes that operate at or below 800°F. This new NOx limit of 60 ppm will be the same compliance limit required for higher temperatures and therefore the same limit at any process temperature in the afterburner technologies category. (ETS Recommendation #6)

**TABLE ES-1**

**Summary of Recommendations from Rule 1147 Draft Technology Assessment and ETS Comments/Recommendations**

<b>Equipment Category</b>	<b>Rule 1147 Recommendations</b>	<b>Basis for Recommendation</b>	<b>ETS Comments</b>
<b>SCAQMD Staff Recommendations in Rule 1147 Draft Technology Assessment:</b>			
Low Temperature Operations Including Ovens and Dryers	Exempt new and existing in-use units with total rated heat input of less than 325,000 Btu/hour	Technical Feasibility	ETS concurs with SCAQMD Staff Recommendation #1
Evaporators, Heated Process Tanks, or Parts Washers with an Integrated Heated Tank	Delay compliance with the NOx emission limit for existing in-use units until the combustion system or tank is modified, relocated or replaced	Technical Feasibility	ETS concurs with SCAQMD Staff Recommendation #2
Multi-chamber Burn-off Ovens, Burn-out Furnaces, and Incinerators	Change the NOx emissions limit from 30 ppm to 60 ppm NOx for the primary chamber of equipment in this category for processes that operate at or below 800°F (same limit for all process temperatures)	Technical Feasibility	ETS concurs with SCAQMD Staff Recommendation #3
Units with actual NOx emissions of one pound per day or less	Delay compliance with the NOx emission limit for other existing in-use units with actual NOx emissions of one pound per day or less until the unit or combustion system is modified, relocated or replaced	Cost Effectiveness	ETS concurs with SCAQMD Staff Recommendation #4
Spray Booths	Delay compliance with the NOx emission limit for existing in-use units until the booth or heating system is modified, relocated or replaced	Cost Effectiveness	ETS concurs with SCAQMD Staff Recommendation #5
<b>ETS Recommendation After Review of Rule 1147 Draft Technology Assessment:</b>			
Afterburner Technologies	Change the NOx emissions limit from 30 ppm to 60 ppm NOx for equipment in this category with processes that operate at or below 800°F (same limit for all process temperatures)	Technical Feasibility	ETS Recommendation #6

## **II. STATEMENT OF WORK**

ETS, Inc. (ETS) was commissioned by the South Coast Air Quality Management District (SCAQMD), under the direction of the Planning and Rules Manager, to review and provide comments on SCAQMD Staff's Draft Technology Assessment of small and low emission combustion equipment subject to SCAQMD Rule 1147. This independent review focused on the purpose of the Technology Assessment, which was to evaluate the technical feasibility of retrofitting small and low emission units to comply with Rule 1147 nitrogen oxide (NO<sub>x</sub>) emission limits and the cost and cost effectiveness of replacing heating systems in these units. The review and comments were specific to the Rule 1147 requirements and not the requirements of other SCAQMD rules, including Regulation XIII (New Source Review) or other agencies' or organization's regulations and requirements. ETS was contracted to perform the following services:

### **Task 1 – Review and analyses of technical and cost information compiled by SCAQMD in Draft Rule 1147 Technology Assessment**

The SCAQMD Draft Technology Assessment for Rule 1147 Small and Low Emission Sources, found in Appendix A, evaluated the following ten major categories of small and low emission combustion equipment regulated by SCAQMD Rule 1147 – NO<sub>x</sub> Reductions from Miscellaneous Sources:

1. Afterburner Technologies
2. Spray Booths
3. Crematories
4. Fryers
5. Heated Process Tanks
6. Heat Treating Operations
7. Metal Melting Processes
8. Multi-Chamber Burn-Off Ovens and Incinerators
9. Ovens and Dryers
10. Food Ovens

### **Task 2 – Provide comments and suggestions on the technology review, cost and cost effectiveness data and analysis in the SCAQMD Draft Technology Assessment**

The project included a review of the ten major categories of equipment evaluated by SCAQMD and their associated costs and cost effectiveness. ETS also provided review and commentary on the costing approach and the cost effectiveness methodologies used by the agency.

### **Task 3 – Attend at least two meetings with SCAQMD Staff and one with Stakeholders at a Rule 1147 Task Force Meeting at SCAQMD Headquarters**

### **III. RULE 1147 TASK FORCE MEETING HELD ON AUGUST 3, 2016 AT SCAQMD HEADQUARTERS**

ETS attended a Rule 1147 Task Force Meeting with SCAQMD Staff, Rule 1147 Task Force members, and Stakeholders that was held at SCAQMD Headquarters on August 3, 2016. The purpose of the meeting was as follows:

- Introduce ETS to SCAQMD Staff, Rule 1147 Task Force members, and Stakeholders
- Receive input from the Stakeholders on SCAQMD's Draft Technology Assessment which was released for public review on January 29, 2016.
- Discuss the future activities and schedule for Rule 1147

The focus of this project effort was to review and provide comments on SCAQMD Staff's Draft Technology Assessment for Rule 1147 Small and Low Emission Sources, dated February 2016, which is located in Appendix A of this report. The Draft Technology Assessment was made available on January 29, 2016 for public review at the following SCAQMD web address: <http://www.aqmd.gov/home/regulations/rules/support-documents#r1147>. Additionally, Appendix A contains the SCAQMD Governing Board Letter and Draft Rule 1147 Technology Assessment from the Board Meeting date of March 4, 2016 (Agenda No. 25). The synopsis from the Board Meeting states that Staff had proposed to hire a third party to review the Draft Technology Assessment and the Board action was to receive and file the Draft Rule 1147 Technology Assessment.

Appendix B contains items from the August 3, 2016 Rule 1147 Task Force Meeting such as the Meeting Agenda (Attachment B-1), the SCAQMD Staff Presentation (Attachment B-2), and the ETS Presentation (Attachment B-3). Appendix B also contains the sign-in sheet from the Rule 1147 Task Force Meeting (Attachment B-4) and business cards that were provided to both SCAQMD and ETS at the meeting (Attachments B-5 and B-6, respectively).

The primary purpose of the Task Force Meeting was to receive input from Stakeholders prior to preparing an analysis of the Draft Technology Assessment. ETS was under the impression that Rule 1147 Task Force Meeting attendees would have previously reviewed the SCAQMD Staff's February 2016 Draft Technology Assessment for Rule 1147 Small and Low Emission Sources prior to the August 3, 2016 meeting date since it had been released for public review on January 29, 2016. Based on that assumption, ETS created presentation slides for each of the five SCAQMD Staff Recommendations that were already documented in the Draft Technology Assessment in order to generate Stakeholder input and discussion during the meeting. Many of the Stakeholder questions or comments received during the meeting required input from SCAQMD Staff present at the meeting because they dealt with topics related to compliance and rule implementation that were either not applicable to the specific ETS tasks or they were topics raised and addressed during the rulemaking process. Also, some of the Stakeholder comments received appeared to have already been addressed and agreed upon by SCAQMD in the Staff Recommendations of the February 2016 Draft Technology Assessment. Staff indicated to the Stakeholders that ETS would be available immediately following the meeting to receive

comments and that the ETS contact information could be obtained so that Stakeholders could submit comments subsequent to the meeting.

Several pieces of information were received right after the conclusion of the Rule 1147 Task Force Meeting from Anthony Endres of Furnace Dynamics, Inc. Subsequent to the Rule 1147 Task Force Meeting, Stakeholders were given a deadline of Tuesday, August 23, 2016 to submit all inputs, data, comments, and/or concerns to ETS for independent review. All of the Stakeholder information received by ETS and the ETS responses to comments are addressed in Sections VIII and IX of this report.

## **IV. INFORMATION REVIEWED BY ETS TO DATE**

### **A. General Information Pertaining to Rule 1147**

As previously stated, the primary focus of the ETS project effort was to review and provide comments on SCAQMD Staff's Draft Technology Assessment for Rule 1147 Small and Low Emission Sources, dated February 2016 (Appendix A). Relevant sections from the following additional sources, which were referenced in the Draft Technology Assessment, were also examined during the ETS independent review:

1. EPA, 2002; *EPA Air Pollution Control Cost Manual, Sixth Edition* [EPA/452/B-02-001], United States Environmental Protection Agency, Office of Air Quality Planning and Standards, January 2002.
2. SCAQMD, 2011; *Rule 1147 – NOx Reductions from Miscellaneous Sources*, South Coast Air Quality Management District, September 2011.
3. SCAQMD, 2000; *Best Available Control Technology Guidelines Part C: Policies and Procedures for Non-Major Polluting Facilities*, South Coast Air Quality Management District (August 17, 2000, Proposed Amended October 2016).
4. SCAQMD, 2000; *Best Available Control Technology Guidelines Part D: BACT Guidelines for Non-Major Polluting Facilities*, South Coast Air Quality Management District (October 20, 2000, Proposed Amended October 2016).

### **B. Information Received from SCAQMD**

In order to effectively perform an independent review and analysis of the technical and cost information presented in the Draft Technology Assessment, ETS requested some of the supporting files that SCAQMD Staff had compiled for the development of the Draft Technology Assessment. The following files were provided by SCAQMD to ETS for review, with some confidential information therein:

1. SCAQMD Source Test Databases as of January 2015
2. Summary of Low and High Temp Burner Costs

3. Spray Booth Costs
4. Immersion Tube Heating and Metal Melt Furnace Calculations
5. Contacts for Low NO<sub>x</sub> Burner Manufacturers
6. Rule 1147 Equipment Category Estimates

### **C. Additional Sources Referenced by ETS**

In addition to the sources mentioned above, ETS consulted numerous sources of information regarding low NO<sub>x</sub> burner technology applicable to Rule 1147 such as burner manufacturer data, technical feasibility, industry expert reports, etc. Specific sources were cited throughout this report where appropriate.

## **V. ETS COMMENTS AND SUGGESTIONS ON SCAQMD TECHNOLOGY REVIEW**

As explained in the SCAQMD Draft Technology Assessment and as understood by ETS, the primary focus of the ETS independent review was the availability of burner systems and units for small and low use equipment in processes with NO<sub>x</sub> emissions of one pound per day or less for the remaining categories of Rule 1147 equipment that were not addressed through the amendment of Rules 219 and 222 and adoption of Rule 1153.1. These small and low emission sources are not subject to the best available control technology (BACT) requirements as new sources.

The Draft Technology Assessment contained a large amount of information on the equipment and wide variety of processes regulated by Rule 1147 and utilized information from the SCAQMD permit system, SCAQMD emissions testing programs, and discussions with equipment and burner manufacturers, affected businesses, consulting engineers, industry, and business representatives. The ETS review encompassed SCAQMD Staff's evaluation on the types and number of equipment affected by Rule 1147, the emission characteristics of that same equipment, and the estimates for cost and cost effectiveness of replacing old burners, either by retrofit or replacement of the unit.

The ten major categories of equipment that were evaluated in the Draft Technology Assessment were: 1) afterburner technologies, 2) spray booths, 3) crematories, 4) fryers, 5) heated process tanks, 6) heat treating, 7) metal melting furnaces, 8) multi-chamber burn-off ovens and incinerators, 9) ovens and dryers, and 10) food ovens. Some of the processes utilizing the above equipment and regulated by Rule 1147 were described as including, but not limited to, coating, printing, textile processing, material processing, and manufacturing using wood, plastics, ceramic and metal materials. The largest fraction of the equipment subject to Rule 1147 heats air that is directed to a process chamber which transfers heat to process materials (convective heating). The other categories of equipment directly heat products using a combination of radiant and convective heating.

As defined by SCAQMD Rule 1147, “NO<sub>x</sub> emissions means the sum of nitrogen oxide and nitrogen dioxide in the flue gas, collectively expressed as nitrogen dioxide.” NO<sub>x</sub> emissions are formed by the following three different mechanisms<sup>1</sup>:

1. **Thermal NO<sub>x</sub>** is formed by the reaction of nitrogen and oxygen at high combustion temperatures (typically above flame temperatures of 2,370°F (1299°C)).
2. **Fuel Bound NO<sub>x</sub>** is formed by the direct oxidation of the already-ionized nitrogen contained in the fuel source. For cleaner burning fuels like natural gas and liquefied petroleum gas (LPG), fuel NO<sub>x</sub> generation is insignificant.
3. **Prompt NO<sub>x</sub>** is formed from molecular nitrogen in the air combining with fuel in fuel-rich conditions. This nitrogen then oxidizes along with the fuel and becomes NO<sub>x</sub> during combustion, just like fuel NO<sub>x</sub>.

The main functions of low NO<sub>x</sub> burners are to create more uniform combustion, better control the air-fuel mixture, and reduce the combustion residence times. These characteristics will reduce NO<sub>x</sub> formation and reduce the peak flame temperature at which thermal NO<sub>x</sub> is formed. The combustion uniformity reduces the formation of fuel rich zones where prompt NO<sub>x</sub> is formed. Premixing of combustion air with fuel can also aid in keeping the temperature uniform in an oven or furnace, which is often necessary to obtain critical product characteristics.

Another method for controlling NO<sub>x</sub> emissions for some of the equipment categories regulated by Rule 1147 is flue gas recirculation (FGR). FGR is a technique in which a portion of the cooled exhaust flue gas is recirculated back to the burner. FGR aids in lowering NO<sub>x</sub> by absorbing heat from the flame to reduce the peak flame temperature and by diluting the oxygen content of the combustion air.

Matt Brueck, Sales Engineer at Maxon Corporation, states the following in an article published in 2002 regarding an oven retrofit to meet lower environmental emission standards:

<sup>2</sup>The first and most important step in controlling NO<sub>x</sub> emissions is to use the latest low emission technology. Low emission burners control the air-fuel mixture and flame temperature better than traditional burners that have been on the market for the last 30 years. Traditional oven burners typically produce emissions on the order of 100 ppm NO<sub>x</sub> corrected (to 3 percent O<sub>2</sub>). Newer technology burners can reduce the emission rates to 25 ppm NO<sub>x</sub> corrected and lower. The second important step is evaluating the application and the environment in which combustion will occur. The chamber temperature is critical to make any emissions guarantee. NO<sub>x</sub> is formed more easily at higher temperatures, especially above 1,000°F (538°C). Most oven applications are in the range of 300 to 500°F (149 to 260°C), making it easier to control NO<sub>x</sub> than in a high temperature application.

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<sup>1</sup> EPA, 1999; *EPA Technical Bulletin: Nitrogen Oxides (NO<sub>x</sub>), Why and How They are Controlled* [EPA/456/F-99-006R], United States Environmental Protection Agency, Office of Air Quality Planning and Standards, November 1999.

<sup>2</sup> Brueck, Matt; California Emissions Standards Met With Oven Retrofit; *Process Heating*, May 1, 2002.



Low NOx burners are a mature, well proven technology for NOx control and they are available from numerous vendors. The advent of commercially available low NOx burners in the last two decades for miscellaneous combustion sources has allowed for adoption of new rules in the San Joaquin Valley Unified APCD in 2005 and the SCAQMD in 2008.<sup>3</sup> SCAQMD Rule 1147 has been identified as being an important component of the attainment strategy to meet both the federal annual PM<sub>2.5</sub> ambient air quality standard and the ozone standard.

Based on the analysis conducted in the Draft Rule 1147 Technology Assessment, which was released in February 2016, SCAQMD Staff made a total of five recommendations for proposed changes to Rule 1147. Three of the recommendations were determined based on technical feasibility and the other two recommendations were determined based on cost effectiveness. The two SCAQMD recommendations based upon cost effectiveness, including the ETS comments, will be discussed in Section VII of this report.

ETS concurs with the statement made in the SCAQMD Draft Technology Assessment which states that “with the exception of a few categories of equipment, the technology review demonstrates that low NOx burner systems are available for every category of equipment subject to Rule 1147.” For the cases where SCAQMD determined that either low NOx combustion systems are currently not available for some types of small units or some categories of equipment are difficult to retrofit, Staff proposed the following three changes to Rule 1147 based upon technical feasibility:

- Exempt new and existing in-use units with total rated heat input of less than 325,000 Btu/hour from the Rule 1147 NOx emission limit (Staff Recommendation #1)
- Delay compliance with the NOx emission limit for existing in-use heated process tanks, evaporators and parts washers with an integrated heat tank until such time that the combustion system or tank is modified, replaced, or relocated (Staff Recommendation #2)
- Change the NOx emission limit from 30 ppm to 60 ppm NOx for the primary chamber of multi-chamber incinerators, burn-off ovens, burn-out furnaces and incinerators for all process temperatures (Staff Recommendation #3)

## **VI. ETS COMMENTS AND SUGGESTIONS ON THE SCAQMD DRAFT TECHNOLOGY ASSESSMENT BY EQUIPMENT CATEGORY**

The ETS comments and suggestions on the burner availability/technology assessment for all ten major categories of equipment identified and discussed in the Draft Technology Assessment are incorporated below, including any additional ETS recommendations for changes to Rule 1147.

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<sup>3</sup> Ventura County Air Pollution Control District (APCD); *Staff report for: Proposed New Rule 74.34, NOx Reductions from Miscellaneous Sources*, November 2015.

## **A. ETS Comments on Afterburner Technologies**

Based on the estimates in the Draft Technology Assessment, there are approximately 900 units in the afterburner technologies category, representing the third largest group of equipment regulated by Rule 1147, which are used to capture and incinerate VOCs, PM and toxic air contaminants. A review of the information presented in Appendix E of the Draft Technology Assessment and the SCAQMD as of January 2015 indicates that there are a wide variety of processes and burner types represented in this category. The Draft Technology Assessment also stated that “given the variety of processes used as afterburners, their different emission characteristics and older equipment permitted at emission levels close to but above some current BACT levels, a rule NO<sub>x</sub> limit of 60 ppm was proposed for this category of equipment and adopted in Rule 1147.”

While the Source Test Database as of January 2015 indicated that the 24 afterburner units tested passed the 60 ppm NO<sub>x</sub> limit (with average NO<sub>x</sub> emissions of approximately 40 ppm and a range from 21 ppm to 54 ppm), it was unclear if any of the units tested had a process temperature  $\leq 800^{\circ}\text{F}$  and were required to meet the 30 ppm NO<sub>x</sub> limit in Rule 1147 (as defined in Table 2-1 of the Draft Technology Assessment). Most catalytic oxidizers operate at lower process temperatures, ranging from approximately 550°F to 850°F, due to the assistance of the catalyst which promotes the oxidation reaction to occur at a lower temperature than is required for thermal ignition. Some of the catalytic oxidizer units subject to Rule 1147 may utilize the same type of high temperature, medium to high velocity burners that are used in crematories, kilns, heating treating, and burn-off furnaces, which are designed to have NO<sub>x</sub> emissions in the 40 to 60 ppm range. For example, some catalytic oxidizer units may use the Eclipse Thermjet burner and be capable of meeting the 60 ppm NO<sub>x</sub> emission limit; however, at a process temperature less than 800°F may not be able to meet the existing 30 ppm NO<sub>x</sub> emission limit. For the above technical feasibility reasons ETS recommends that consideration be given to change the following in Rule 1147 for the afterburner technologies equipment category:

Change the NO<sub>x</sub> emission limit in the afterburner technologies equipment category from 30 ppm to 60 ppm for processes that operate at or below 800°F. This new NO<sub>x</sub> limit of 60 ppm would be the same compliance limit required for higher temperatures and therefore the same limit at any process temperature in the afterburner technologies category (ETS Recommendation #6)

ETS concurs that the 60 ppm NO<sub>x</sub> emission limit for the afterburner technologies equipment category is technically feasible, can be achieved with a variety of combustion technologies or possibly with the original burners, and that the source testing demonstrates “achieved in practice.”

## **B. ETS Comments on Spray Booths**

The majority of heated spray booths in the SCAQMD are auto body refinishing booths used for refinishing passenger cars and light trucks. ETS reviewed the spray booth equipment category information presented in Appendix F of the Draft Technology Assessment. It was noted that due to an achieved in practice LAER/BACT limit of 30

ppm NOx for makeup air heaters in spray booth applications and the fact that many SCAQMD permitted booths are used as curing or drying ovens in manufacturing operations, a Rule 1147 NOx limit of 30 ppm was justified. It was also noted that BACT for ovens and most dryers has been 30 ppm NOx since 1998.

ETS concurs that there is a variety of available burner technology in this equipment category and the NOx emission limit of 30 ppm is technically feasible. It also appears that there are at least 32 models of booths and heating systems available from eight manufacturers that received certification of compliance with the Rule 1147 emission limits. The average NOx emission concentration of 24 ppm, with a range from 6 ppm to 30 ppm, for the 10 spray booths used in auto body repair was confirmed by ETS in the SCAQMD Source Test Database as of January 2015. The average NOx emission concentration of 18 ppm for the normal/high fire testing of the 13 spray booths that are not used for auto body repair (spray booth (other) category) was also confirmed by ETS.

Please see Section VII.B of this report for ETS comments on heating system costs and cost effectiveness for the spray booth category of equipment.

### **C. ETS Comments on Crematories**

A review of the information presented in Appendix G of the Draft Technology Assessment regarding the 20 crematories that have been tested and comply with the Rule 1147 NOx emission limit was conducted. The 20 crematory compliance tests reviewed by SCAQMD Staff which complied with the 60 ppm NOx emission limit included original burners and many units with new burners and control systems. ETS concurs that the 60 ppm NOx emission limit for the crematories equipment category is technically feasible, can be achieved by available burners and combustion control systems, and that the source testing demonstrates “achieved in practice”. The average NOx emission concentration of 50 ppm, with a range from 30 ppm to 59 ppm, for the 20 crematory tests was also confirmed by ETS in the SCAQMD Source Test Database as of January 2015.

### **D. ETS Comments on Fryers**

ETS conducted a review of the information presented in Appendix H of the Draft Technology Assessment regarding the two major types of fryers, conveyor and batch, which also had different types of heating systems including immersion tube heating in conveyor units and external oil heating system for the batch type fryers. It was reported that 7 existing in-use fryers have completed emission testing and comply with the Rule 1147 NOx emission limit of 60 ppm, all of which were tested with their original burner systems. ETS concurs that the 60 ppm NOx emission limit for the fryers equipment category is technically feasible, may be achievable with original heating systems, and that the source testing demonstrates “achieved in practice”. The average NOx emissions of 29 ppm for the 7 fryer tests completed, with a range from 14 ppm to 56 ppm, were confirmed by ETS in the SCAQMD Source Test Database as of January 2015.

## **E. ETS Comments on Heated Process Tanks, Evaporators, and Parts Washers**

The review conducted by ETS on this category of equipment consisted primarily of the information presented in Appendix I of the Draft Technology Assessment. Based on Staff's estimations there are roughly 63 units affected by Rule 1147 in this category which consists of heat process tanks, parts washers and evaporators. Within the approximately 63 affected units, Staff has identified and very thoroughly described five different types of tank heating systems that are represented in this equipment category based on individual component factors such as heat exchanger configurations, diameter of heated tube systems, burner types, burner heat inputs, burner firing rates, burner firing pressures, and burner combustion control. Many of the units in this category utilize immersion tube heating tube systems to heat solutions in a tank.

ETS reviewed the Source Test Database as of January 2015 compiled by Staff on the seven units that have completed testing in this category of equipment. All seven units complied with the Rule 1147 NO<sub>x</sub> limit of 60 ppm for heated process tanks, evaporators and parts washers with average NO<sub>x</sub> emissions of approximately 37 ppm and range of 4 to 55 ppm. Also, it should be noted that all seven of those units complied with the NO<sub>x</sub> emission limits using their original burners; however, only three of the different types of heating systems that were described in Appendix I of the Draft Technology Assessment have been identified within the Rule 1147 testing program to date.

The fourth type of heating system identified in the Draft Technology Assessment uses high pressure burners firing into smaller diameter tubes typically ranging from 2 to 8 inches, but none appear to have been tested to date. A fifth type of tank heating system with tube firing burners used in heat treating has also been demonstrated to meet the 60 ppm NO<sub>x</sub> emission limit, but was noted as not being tested in heated tank applications as of yet.

Fundamentally, ETS concurs that the Rule 1147 NO<sub>x</sub> emission limit of 60 ppm for this category of equipment should be technically feasible, there is an array of equipment that should be available to achieve the limit, and three of the different types of heating systems have been "achieved in practice". The importance of the design metric utilized in Figure I-1 of the Draft Technology Assessment is appropriately noted as well, since it impacts the formation of NO<sub>x</sub> in the heating tubes.

One of the challenges within this equipment category, however, is the fact that the burners and heat exchanger tubes are designed as one integrated system and some of the heat exchanger tube systems are custom designed to suit the specific application. This means that if an individual heated tank (process tank or parts washer) or an evaporator system on an existing in-use unit within Rule 1147 does not comply with the emission limit, then likely the entire process tank would have to be replaced.

This issue, however, appears to have already been addressed in the SCAQMD Draft Technology Assessment, which was released for public review on January 29, 2016.

Based upon technical feasibility, ETS concurs with the following SCAQMD Staff recommendation for Rule 1147:

Delay compliance with the NO<sub>x</sub> emission limit for existing in-use evaporators, heated process tanks, or parts washers with an integrated heated tank until the combustion system or tank is modified, relocated or replaced. New units would be required to meet the emission limit unless the total unit heat rating is less than or equal to 325,000 Btu/hour. (Staff Recommendation #2)

## **F. ETS Comments on Heat Treating Furnaces and Kilns**

A review was conducted on the information presented in Appendix J of the Draft Technology Assessment regarding the heat treating equipment category. The processes in this category generally involve heating metals or alloys in a furnace or oven or treating metals and nonmetallic refractory materials in a manufactured vessel, furnace, or other product using temporary burner systems (i.e., kilns used for heat treating products made from ceramics, clay, and other non-metallic materials). The types of burners utilized in the heat treating equipment category depend upon the temperature required and whether they fire directly into the furnace or into tubes which transfer the heat from the tubes to the furnace via fans.

In the case of lower temperature heat treating ovens, the burners are typical of other types of ovens with air heating burners such as the Eclipse Winnox and Maxon Cyclomax burners. For higher temperature applications with direct fired furnaces, high velocity burners such as the Maxon Kinedizer and the Eclipse Thermjet are typically utilized. In the case of indirect fired furnaces, specialized tube firing burners such as the Eclipse Tube Firing Burner (TFB) are commonly used. The high velocity and tube firing burners, however, are available from many different manufacturers and several of the tube firing burner manufacturers also have an option to add flue gas recirculation (FGR) for reducing NO<sub>x</sub> emissions.

SCAQMD Staff reported in the Draft Technology Assessment that the emission test results as of January 2015 cover a variety of furnaces processing aluminum and steel alloys across a broad temperature range. Most of the heat treating furnaces tested met the Rule 1147 emission limit with their existing burners and it appears that only a few furnaces have either had their burners replaced, added an FGR system, or replaced their furnace in order to comply with Rule 1147. Despite the fact that new emission test results for kilns have not yet been received, emission tests completed on small and large kilns prior to rule adoption in 2008 and rule amendment in 2011 demonstrated compliance with a 60 ppm NO<sub>x</sub> emission limit.

ETS concurs that the 60 ppm NO<sub>x</sub> emission limit for the heat treating equipment category is technically feasible. ETS confirmed that most of the furnace NO<sub>x</sub> emission concentrations were in the range from 45 ppm to 55 ppm with an average of approximately 50 ppm in review of the 23 source test information for metal heat treating obtained from the SCAQMD Source Test Database as of January 2015 and the source testing demonstrates “achieved in practice”.

## **G. ETS Comments on Metal Melting**

ETS conducted a review of the information presented in Appendix K of the Draft Technology Assessment regarding the metal melting furnace category. ETS concurs that the 60 ppm NO<sub>x</sub> emission limit for the metal melting equipment category is technically feasible, may be achievable with original burners, and that the source testing demonstrates “achieved in practice”. The average NO<sub>x</sub> emissions of 42 ppm for the 8 larger metal melting furnaces tested and 54 ppm for the 5 small pot and crucible melting furnaces were confirmed by ETS in the SCAQMD Source Test Database as of January 2015.

## **H. ETS Comments on Multi-chamber Burn-off Ovens and Incinerators**

ETS conducted a review of the information presented on page 2-3 and in Appendix L of the Draft Technology Assessment on multi-chamber burn-off ovens and incinerators. It was reported that 12 burn-off ovens, furnaces and incinerators have completed review of their test results and most units were tested with original burners. Review of the SCAQMD Source Test Database as of January 2015 confirmed that the average NO<sub>x</sub> concentration in the stack after the afterburner section was less than 45 ppm and the range was from 26 to 55 ppm. However, SCAQMD Staff had previously received inputs from Stakeholders (local manufacturers of burn-off furnaces and company representatives) to indicate that it is not possible to use the preferred type of burner and meet a 30 ppm emission limit in the primary chamber for a process temperature  $\leq 800^{\circ}\text{F}$ . Those particular burners are designed to have NO<sub>x</sub> emissions in the range of 40 to 60 ppm. ETS concurs that a 60 ppm NO<sub>x</sub> emission limit for both the primary and secondary chambers in this equipment category is technically feasible, may be achievable with the original burners, and that the source testing demonstrates “achieved in practice”.

Also, based on the previously held discussions and assessments between SCAQMD and Stakeholders, ETS concurs with the following SCAQMD Staff recommendation for the multi-chamber burn-off ovens and incinerators category of equipment:

Change the NO<sub>x</sub> emission limit from 30 ppm to 60 ppm NO<sub>x</sub> for the primary chamber of multi-chamber incinerators, burn-off ovens, burn-out furnaces and incinerators for all process temperatures (Staff Recommendation #3)

## **I. ETS Comments on Ovens and Dryers**

ETS conducted a review of the information presented on page 2-3 and in Appendix M of the Draft Technology Assessment on ovens and dryers, which were reported to be the second largest category of equipment regulated by Rule 1147. The ovens and dryers are utilized in a variety of processes including curing of coatings and other materials, drying coated and printed products, and drying materials. There are a variety of burner types used in this equipment category with the most common type being nozzle mixing air heating burners manufactured by Eclipse and Maxon.

During the review of the SCAQMD Source Test Database, ETS also observed that approximately 66% of the 140 tested ovens and dryers used Maxon burners and approximately 25% used Eclipse burners. Over 50% of the Maxon burners tested were from the Cyclomax product line and almost 85% of the Eclipse burners tested were from the Winnox product line. ETS conducted a general search for other manufacturers of low NOx burners for very small, low temperature ovens and dryers that are designed to comply with a 30 ppm NOx limit, in addition to a detailed review of the aforementioned low NOx burner product line specifications. The smallest low NOx air heating burners designed to comply with the 30 ppm NOx emission limit that could be found by ETS were between 400,000 and 500,000 Btu/hour. For example, the Maxon packaged Cyclomax<sup>®</sup> burners are available in 5 sizes with the smallest burner size rated at 400,000 Btu/hour (Cyclomax Model Number 0.4M).<sup>4</sup> The Maxon packaged Ovenpak<sup>®</sup> LE burners were available in 10 sizes with the smallest burner size rated at 500,000 Btu/hour (LE 5).<sup>5</sup> The Eclipse Winnox burners were available in 8 sizes with the smallest burner size rated at 550,000 Btu/hour (Eclipse Model Number WX0050).<sup>6</sup>

ETS was able to find smaller sizes of low NOx burners; however, they were for high temperature applications such as heat treating furnaces and kilns. The available smaller burners for high temperature applications typically require multiple small burners and they are designed to have NOx emissions in the range of 40 to 60 ppm. As an example, Eclipse makes a “nozzle-mixing burner with a packaged blower that is designed to fire with fixed combustion air over a wide turndown range” called ThermAir. These burners are available in 9 sizes ranging from the smallest size of 150,000 Btu/hour to the largest size of 5,000,000 Btu/hour; however, the Eclipse product literature states the low NOx emissions are 60 ppm at high fire.<sup>7</sup>

It was reported that 140 units used for a variety of processes have approved test results and comply with the 30 ppm NOx limit. ETS’ review of the SCAQMD Source Test Database as of January 2015 confirmed that the average NOx emission concentration for most ovens and dryers was about 20 ppm with a range of 4 ppm to 30 ppm. ETS concurs that the 30 ppm NOx emission limit for the ovens and dryers equipment category is technically feasible and can be achieved by available technology, with the exception of low NOx burners with a total rated heat input of less than 325,000 Btu/hour, and that the source testing demonstrates “achieved in practice.”

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<sup>4</sup> *Honeywell Maxon Product Catalog: Industrial Burners* (accessed September 20, 2016); available from <https://www.maxoncorp.com/Directory/product/CYCLOMAX-Low-NOx/24/Natural-Gas-Burner-Low>.

<sup>5</sup> *Honeywell Maxon Product Catalog: Industrial Burners* (accessed September 20, 2016); available from [https://www.maxoncorp.com/Directory/product\\_detail/OVENPAK-LE-natural-gas-lownox/113/](https://www.maxoncorp.com/Directory/product_detail/OVENPAK-LE-natural-gas-lownox/113/).

<sup>6</sup> *Honeywell Eclipse Product Catalog: Air Heating Burners* (accessed September 20, 2016); available from [www.eclipsenet.com/products/winnox/](http://www.eclipsenet.com/products/winnox/).

<sup>7</sup> *Honeywell Eclipse Product Catalog: Air Heating Burners* (accessed September 20, 2016); available from [www.eclipsenet.com/products/thermair/](http://www.eclipsenet.com/products/thermair/).

ETS agrees with the SCAQMD Draft Technology Assessment which states that “there is a lower limit on the availability of low NOx burners for ovens and dryers” to meet a NOx emission limit of 30 ppm and concurs with the following SCAQMD Staff recommendation:

Exempt new and existing in-use units with total rated heat input of less than 325,000 Btu/hour from the Rule 1147 NOx emission limit (Staff Recommendation #1)

As part of the research conducted by ETS for this project, another noteworthy item pertinent to this category of equipment from the previously referenced article by Matt Brueck of Maxon Corporation is the following:

<sup>8</sup>Traditional oven burners have higher thermal turndowns than low emission oven burners. Because of this, low NOx oven burners should never be oversized. In the past, a larger-than-necessary burner may have been used without concern for overheating the oven at low fire. Now it is recommended that engineers look closer at an oven’s heat balance, especially at low fire. In short, use the smallest low NOx burner possible for any application below about 5,000,000 Btu/hour.

## **J. ETS Comments on Food Ovens**

It was reported in Appendix N of the Draft Technology Assessment that food ovens in use at the time SCAQMD Rule 1153.1 was adopted are no longer subject to Rule 1147. However, new food ovens are currently subject to Rule 1147 requirements. It also stated that Staff is currently evaluating alternative rule development options for exempting new food ovens from Rule 1147. ETS has no specific comments on the food ovens category of equipment and there were no Rule 1147 Stakeholder inputs received in regard to this specific category.

Upon review of the February 2016 Rule 1147 Draft Technology Assessment by major equipment category, ETS concurs with SCAQMD’s three recommendations for proposed changes to Rule 1147 based on technical feasibility (Staff Recommendations #1, #2 and #3). ETS had one additional recommendation for a change to Rule 1147 based on technical feasibility for the Afterburner Technologies category of equipment discussed in Section VI.A above:

Change the NOx emission limit in the afterburner technologies equipment category from 30 ppm to 60 ppm for processes that operate at or below 800°F (ETS Recommendation #6)

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<sup>8</sup> Brueck, Matt; California Emissions Standards Met With Oven Retrofit. *Process Heating*, May 1, 2002.



## **VII. ETS COMMENTS AND SUGGESTIONS ON COST AND COST EFFECTIVENESS ANALYSIS IN THE SCAQMD DRAFT TECHNOLOGY ASSESSMENT**

### **A. ETS Comments and Suggestions on Cost Effectiveness**

The basic methodology utilized for calculating cost and cost effectiveness in the SCAQMD Rule 1147 Draft Technology Assessment is consistent with prior SCAQMD rule development studies, including those that ETS has been contracted as an independent consultant to either prepare or review. As described on page 3-3 of the Draft Technology Assessment, SCAQMD BACT Guidelines and rule development use a discounted cash flow analysis to estimate the cost and cost effectiveness of emission control options. As stated in the BACT Guidelines for minor (non-major) sources, “the discounted cash flow method calculates the present value” (also referred to as net present value) “of the control costs over the life of the equipment by adding the capital cost to the present value of all annual costs and other periodic costs over the life of the equipment.”

For the scenarios developed in the Draft Technology Assessment, a net present value was calculated for the control equipment using the total installed cost (which consists of the purchased equipment cost, shipping, tax, and installation costs) and annual costs. The minor source BACT Guidelines also state that “a real interest rate of four percent and a 10-year equipment life is used.” However, it is noted by ETS in the SCAQMD Draft Technology Assessment that there is a key difference in the calculation of cost effectiveness between the BACT Guidelines and rule development. For rule development, such as the Rule 1147 Draft Technology Assessment, a best estimate of the equipment’s useful life is used in the calculation of cost effectiveness instead of a fixed 10-year life assumption that is associated with financing of new equipment. An example is shown below by Equation 1, with a factor of 13.59 to estimate the cumulative annual operating costs during the 20-year life of a control device:

$$\text{NPV} = \text{TIC} + (13.59 \times \text{AC}) \quad (\text{Equation 1})$$

Where:

NPV = Net present value, \$

TIC = Total installed cost, \$

AC = Annual cost, \$

As described in the SCAQMD minor source BACT Guidelines:

“Cost effectiveness evaluations consider both capital and operating costs. Capital cost includes not only the price of the equipment, but the cost for shipping, engineering, and installation. Operating costs or annual costs includes expenditures associated with utilities, labor and replacement costs. Finally, costs are reduced if any of the materials or energy created by the process result in cost savings.”

SCAQMD noted in the Draft Technology Assessment that “because the useful life of boilers, ovens and furnaces can be several decades, the costs of routine maintenance and equipment replacement unrelated to control equipment is not included in the cost effectiveness analysis of regulatory requirements to meet emission standards”.

In terms of annual costs for the types of burners and combustion system components that were evaluated as part of the Draft Technology Assessment, ETS concurs with the exclusion of annual costs because ETS is unaware of specific items in the “Total Annual Cost” list found in Appendix D, Attachment 1-3 of the Draft Technology Assessment (Appendix A of this report) which would result in significant increases in annual expenditures for low NO<sub>x</sub> burners over the existing burner types. It is the opinion of ETS that maintenance of burner components is required for existing burner systems or new low NO<sub>x</sub> burner systems, so recurring costs for annual maintenance of retrofit burners would not be appropriate to include in the cost effectiveness analysis. Moreover, there are likely energy savings (gas and/or electricity) and rebate programs associated with the new equipment which would mitigate any potential increases in annual costs.

Accounting for the excluded annual costs, Equation 1 would be reduced to the net present value being equal to the total installed cost as shown below in Equation 2:

$$NPV = TIC \quad \text{(Equation 2)}$$

The method utilized by SCAQMD Staff to calculate the total cost of replacing equipment, including shipping, tax, and installation costs as described on page 3-6 of the Draft Technology Assessment, is consistent with ETS’ experience in using the EPA Air Pollution Control Cost Manual.

The cost effectiveness of the emission control equipment can then be estimated by dividing the net present value by the emission reduction benefit over the control equipment life (ex. 20-25 years). The cost effectiveness is shown in Equation 3 below in \$/ton of NO<sub>x</sub> removed:

$$CE = NPV / (\text{Total NO}_x \text{ ER Over Project Life}) \quad \text{(Equation 3)}$$

Where:

CE = Cost Effectiveness, \$/ton

NPV = Net present value, \$

ER = Emission Reduction, ton

SCAQMD Staff indicated on page 3 of the March 4, 2016 Board Letter (see Appendix A) that the current SCAQMD BACT Guidelines criteria for equipment that does not have a defined BACT was utilized as a guide to evaluate the cost effectiveness of low NO<sub>x</sub> retrofits for Rule 1147 equipment. ETS reviewed the “Maximum Cost Effectiveness Values” section of the SCAQMD Proposed Amended BACT Guidelines - Part C: Policy

and Procedures for Non-Major Polluting Facilities (dated October 2016). The cost effectiveness criteria as found in the Proposed Amended BACT Guidelines are \$26,910 per ton of NOx for average cost effectiveness and \$80,590 per ton of NOx for the incremental cost effectiveness between two or more control options. These numbers were reported to be based on the criteria adopted by the SCAQMD Governing Board in the 1995 BACT Guidelines, adjusted to second quarter 2016 values using the Marshall and Swift Equipment Cost Index. Discussions in the body of the Rule 1147 Draft Technology Assessment then use the current numbers rounded up to \$27,000 per ton and \$81,000 per ton as a guide to evaluate cost effectiveness for the low NOx retrofits for Rule 1147 equipment.

ETS concurs that the utilization of the minor source BACT criteria of \$27,000 per ton of NOx for average cost effectiveness and \$81,000 per ton of NOx for incremental cost effectiveness is appropriate to use as a screening tool for small equipment with NOx emissions of one pound per day or less. However, as noted in the Draft Technology Assessment, “there is no single cost or cost effectiveness limit established by the SCAQMD Board for use in rule development, permitting, or other programs. Cost effectiveness for CARB and SCAQMD rules and programs differ and depend upon the program, the pollutant, the nature of the process and equipment affected and the types of feasible emission control options.” For example, SCAQMD Staff indicated to ETS that thresholds for other SCAQMD rules including Rules 1146/1146.1 (which includes small businesses) and RECLAIM have been significantly higher with cost effectiveness criteria up to \$50,000 - \$60,000 per ton. Staff also indicated that the \$27,000 per ton average cost effectiveness from the BACT Guidelines is not a threshold for rule development or any other program outside of a limited application for BACT (sources without defined BACT or an old BACT). Based on ETS’ review of the Draft Technology Assessment, it appears that the \$27,000 per ton was utilized as a screening tool for the small and low emission sources evaluated in the Draft Technology Assessment for Rule 1147 and was not considered as a threshold that should not be exceeded.

It was stated in the Rule 1147 Draft Technology Assessment that the calculation of cost and cost effectiveness for both Rule 1147 adoption and the 2011 amendment were done on a per burner basis. It further stated that the cost effectiveness analysis in that document focused on the cost and emission reduction per burner replaced utilizing the cost for a burner with an integrated blower. In general ETS concurs with the cost effectiveness methodology in the Draft Technology Assessment for the simple fact that for rules, calculations can’t be performed for individual pieces of equipment used in every specific situation. A range of average cost effectiveness values for the following three types of burner categories identified in the Draft Technology Assessment: 1) Low Temperature Ovens and Dryers, 2) High Temperature Applications, and 3) Spray Booths. The different methods utilized by Staff for determination of the emissions reductions for those burner categories are described further in Section VII.B of this report.

As a result of the cost effectiveness analysis conducted in the February 2016 Draft Technology Assessment for Rule 1147, SCAQMD Staff made the following two

recommendations for proposed changes to Rule 1147 based upon cost effectiveness considerations:

1. Delay compliance with the NO<sub>x</sub> emission limit for existing in-use units with actual NO<sub>x</sub> emissions of one pound per day or less until the combustion system is modified, relocated or replaced (Staff Recommendation #4)
2. Delay compliance with the NO<sub>x</sub> emission limit for existing in-use spray booth until the heating system is modified or replaced or the unit is relocated (Staff Recommendation #5)

## **B. ETS Comments and Suggestions on Cost and Cost Effectiveness Data for Small and Low Emission Equipment**

The ETS comments on the cost and cost effectiveness data for the specific categories of small and low emission equipment that were presented in the Rule 1147 Draft Technology Assessment may be found in the sections below:

### **1. Burner Cost and Cost Effectiveness for Low Temperature Ovens and Dryers:**

ETS reviewed both the “Summary of Low and High Temp Burner Costs” developed by SCAQMD (Confidential Information) and the cost and cost effectiveness information presented from pages 3-5 to 3-7 of the Draft Technology Assessment. The typical equipment costs ranging from \$7,500 to \$15,000 for packaged burners and combustion systems in the size range of 500,000 Btu/hour to 2,000,000 Btu/hour, respectively, were reviewed by ETS. Since the focus of this section dealt with the cost effectiveness for low temperature applications with emissions of one pound per day or less, the specific burner types and sizes evaluated by SCAQMD were appropriate and appeared to be representative of typical costs. Also, SCAQMD utilized the higher end of the burner cost range (\$15,000) to perform the cost effectiveness evaluation displayed on page 3-6 of the Draft Technology Assessment.

ETS is familiar with the EPA method utilized by the SCAQMD to calculate the total installed cost, which includes capital cost items such as shipping, tax, and installation costs in addition to the price of the equipment. The cost estimating factor of 2.0 was a conservative approach and included a contingency factor of 13% to address uncertainties in the cost estimation. A total installed cost of \$30,000 was then used to calculate the cost effectiveness for estimated emission reductions of 0.25, 0.50 and 0.75 pounds per day over 260 days per year and 20 years. This resulted in cost effectiveness numbers of \$46,154, \$23,077, and \$15,385 per ton, respectively. By using a midpoint of the cost effectiveness range for typical emission reductions of 0.25 to 0.50 pounds per day, SCAQMD arrived at a midpoint of \$34,500 per ton. The cost effectiveness of \$34,500 per ton to replace combustion systems for low emission ovens and dryers was greater than the SCAQMD minor source (non-major) BACT average criteria of \$27,000 per ton; however, it was less than the incremental criteria of \$81,000 per ton. SCAQMD Staff indicated to ETS that thresholds for other SCAQMD rules including Rules 1146/1146.1 (which

includes small businesses) and RECLAIM have been significantly higher with cost effectiveness criteria up to \$50,000 - \$60,000 per ton.

ETS concurs that the cost of the replacement burners and combustion system components can vary (higher, as well as lower) depending upon which components must be replaced and many other site-specific factors. It was noted by SCAQMD in the Draft Technology Assessment that minor source BACT criteria applies to new sources only; however, ETS concurs that the criteria is appropriate to use as a screening tool for small equipment with emissions of one pound per day or less.

Based upon the review of the Draft Technology Assessment, ETS agrees that the cost effectiveness for some low temperature/low emission ovens and dryers to comply with the Rule 1147 NOx emission limit of 30 ppm may exceed the SCAQMD minor source BACT average criteria for NOx of \$27,000 per ton for new sources without a defined BACT or an old BACT. Therefore, ETS concurs with the following SCAQMD Staff recommendation:

Delay compliance with the NOx emission limit for existing in-use units with actual NOx emissions of one pound per day or less until the combustion system is modified, relocated or replaced (Staff Recommendation #4)

## **2. Burner Cost and Cost Effectiveness for High Temperature Applications:**

ETS reviewed both the “Summary of Low and High Temp Burner Costs” developed by SCAQMD (Confidential Information) and the cost and cost effectiveness information presented from pages 3-7 to 3-9 of the Draft Technology Assessment. The equipment costs for high temperature/low emission applications ranging from \$5,000 to \$15,000 per burner for applications up to 2,000,000 Btu/hour were reviewed by ETS. Since the focus of this section dealt with the cost effectiveness for high temperature applications with emissions of one pound per day or less, the specific burner types and sizes evaluated by SCAQMD were appropriate and appeared to be representative of typical costs.

ETS concurs that the cost of the replacement burners and combustion system components can vary (higher, as well as lower) depending upon which components must be replaced and many other site-specific factors. It was noted by SCAQMD in the Draft Technology Assessment that minor source BACT criteria applies to new sources only; however, ETS concurs that the criteria is appropriate to use as a screening tool for small equipment with emissions of one pound per day or less. SCAQMD Staff indicated to ETS that thresholds for other SCAQMD rules including Rules 1146/1146.1 (which includes small businesses) and RECLAIM have been significantly higher with cost effectiveness criteria up to \$50,000 - \$60,000 per ton.

Based upon the SCAQMD cost effectiveness analyses performed for this equipment class, ETS agrees that the cost effectiveness for high temperature/low emission units

with emission reductions of less than 0.2 pound per day to comply with the Rule 1147 NOx emission limit of 60 ppm may exceed the SCAQMD minor source BACT average criteria for NOx of \$27,000 per ton for new sources without a defined BACT or an old BACT. Therefore, ETS concurs with the following SCAQMD Staff recommendation:

Delay compliance with the NOx emission limit for existing in-use units with actual NOx emissions of one pound per day or less until the combustion system is modified, relocated or replaced (Staff Recommendation #4)

### **3. Heating System Cost and Cost Effectiveness for Spray Booths:**

ETS reviewed the “Heating System Cost and Cost Effectiveness for Spray Booths” found on pages 3-9 and 3-10 of the Draft Technology Assessment and the vendor costing information collected by SCAQMD (Confidential Information). As stated in Appendix A-4 of the Draft Technology Assessment, “business owners and equipment vendors indicated typical automotive booths and many other booth operations have annual average emissions of less than one third pound per day.”

Based on the Draft Technology Assessment, the cost information supplied by SCAQMD and reviewed by ETS supports the cost effectiveness calculation of a new low NOx SCAQMD certified auto repair booth to be at most \$22,000 per ton. However, the cost effectiveness reviewed by ETS for retrofitting an existing in-use auto repair booth with an SCAQMD certified heating system was significantly higher, with a range of \$66,000 to \$80,000 per ton. The cost information supplied to SCAQMD by multiple equipment vendors for adding a new natural gas fired certified heating system (equipment plus labor) to an existing spray booth ranged from \$30,000 to \$50,000, depending upon manufacturer, type of booth and the individual installation. It was stated in the Draft Technology Assessment that “to use an SCAQMD certified burner on a used spray booth, the owner/operator must also install a new heater box, blower, other mechanical components with a new thermostat and control system for moving air in addition to installing the burner, mounting hardware and combustion control system.”

It was noted by SCAQMD in the Draft Technology Assessment that minor source BACT criteria applies to new sources only, however, ETS concurs that the criteria is appropriate to use as a screening tool for small equipment with emissions of one pound per day or less. SCAQMD Staff indicated to ETS that thresholds for other SCAQMD rules including Rules 1146/1146.1 (which includes small businesses) and RECLAIM have been significantly higher with cost effectiveness criteria up to \$50,000 - \$60,000 per ton.

Since the cost effectiveness to retrofit existing in-use spray booths is greater than the minor source average cost effectiveness criteria of \$27,000 per ton for equipment categories without a defined BACT or a very old BACT and may exceed

the incremental criteria of \$81,000 per ton, ETS concurs with the following SCAQMD Staff recommendation for the spray booth category of equipment:

Delay compliance with the NOx emission limit for existing in-use spray booths until the heating is modified, relocated or replaced (Staff Recommendation #5)

Upon review of the cost and cost effectiveness analysis presented in the February 2016 Rule 1147 Draft Technology Assessment, ETS concurs with SCAQMD's two recommendations for proposed changes to Rule 1147 based upon cost effectiveness considerations (Staff Recommendations #4 and #5). ETS did not have any additional recommendations for changes to Rule 1147 based on cost effectiveness considerations.

## **VIII. ETS RESPONSES TO INFORMATION RECEIVED FROM RULE 1147 STAKEHOLDERS BY AUGUST 23, 2016 DEADLINE**

This section summarizes the inputs, data, comments, and/or concerns that ETS received from Stakeholders at the Rule 1147 Task Force Meeting on August 3, 2016 and subsequent to the meeting, but prior to the August 23, 2016 deadline. The information received came from the following three Stakeholders: 1) Furnace Dynamics, Inc., 2) Industrial Process Equipment, Inc., and 3) Wirth Gas Equipment, Inc. ETS identified the information received from the three Stakeholders as nine distinct item numbers (Item #'s 1-9) by the date received. The ETS responses to the Rule 1147 Stakeholder information received by item number are also incorporated in this section.

A summary of the information received from the President of Furnace Dynamics, Inc. at the Rule 1147 Task Force meeting on August 3, 2016 may be found in Appendix C and copies of the four input items received from the Stakeholder are located in Attachments C-1, C-2, C-3, and C-4. Brief summaries of Stakeholder Item #'s 1-4 and the ETS responses are provided below:

### **A. Stakeholder Item #1 – Furnace Dynamics, Inc.**

Stakeholder Item #1 (Attachment C-1) contains a letter from Furnace Dynamics, Inc. titled "A discussion on Potential to Emit (PTE)" with no specific addressee that is dated 11/19/15. The Stakeholder recommended more options for the determination and verification of NOx emissions of one pound per day or less other than PTE. An example case was presented from a large forge facility to try to compare the actual annual NOx emissions to the PTE. A series of charts were also included by the Stakeholder to try to convey the relationship of daily emissions vs. BTU input vs. hours of operation at a variety of different average firing rates.

**ETS Response to Item #1:** This Stakeholder letter is related to rule requirements and compliance issues and the Stakeholder is presenting a recommendation for different demonstration options for NOx emissions of one pound per day or less. These comments are not specific to the Draft Technology Assessment for Rule 1147 Small and Low Emission Sources.

## **B. Stakeholder Item #2 – Furnace Dynamics, Inc.**

Stakeholder Item #2 (Attachment C-2) contains a letter from Furnace Dynamics, Inc. titled “RE. Items of Concern Technology Assessment” that was addressed to Mr. Joe Cassmassi at SCAQMD and dated 02/18/16. The letter stated that the Stakeholder had conducted a cursory review of the Draft Technology Assessment and the Stakeholder provided comments on the following items:

**Stakeholder Item #2-1: Cost Effectiveness: Excluded Costs (Burner Cans)** – In this section of Item #2, the Stakeholder indicated that there was an exclusion of replacement components in burner systems. The Stakeholder had found that low NOx Eclipse Winnox burner cans need to be replaced, usually in 3-10 years with the cost of the can being between \$2,500 - \$5,000 plus installation which can run a couple of thousands.

**ETS Response to Stakeholder Item #2-1:** It is ETS’ understanding that the Eclipse Winnox burners, along with other similar vendor models of low NOx nozzle-mixing air heating burners, typically have options for the material of construction of the burner can. Those options can be different types of alloys and a ceramic or refractory option depending upon the temperature of the process. Older, non-compliant burners had options for burner can construction as well. The selection of the proper burner can material of construction for the specific application is an important design consideration.

Additionally, there are specific manufacturer installation instructions and operational guidelines which may impact burner can life if not properly followed. For example, the Maxon Cyclomax Low NOx burner specification states that the burners should be operated with interrupted pilot and note that emissions can be 20% higher if the pilot is left on continuously and burner can life may be reduced.<sup>9</sup>

There were no details provided on the low NOx burner can issue, no other Stakeholders raised concerns regarding this matter to ETS, and the issue was presented by the Stakeholder as being a specific issue related to one particular manufacturer and equipment model. There were several other burner options presented in the Draft Technology Assessment capable of meeting the Rule 1147 NOx emission limits for this category of equipment, so ETS does not believe that it would be appropriate to include this issue in the calculation of average cost effectiveness for this category of equipment.

**Stakeholder Item #2-2: Cost Effectiveness: Evaluation of cost effectiveness methods** – In this section of Item #2, the Stakeholder stated that “Staff had indicated that the cost effectiveness was based on the differential between the cost of an existing burner and the cost of a new low NOx burner.” The Stakeholder doesn’t feel that this is a valid consideration since this is a replacement rule and would only apply to the very few cases where the existing burner was scheduled for replacement and not to the general population of equipment covered under Rule 1147.

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<sup>9</sup> *Maxon Product Catalog: Cyclomax® Low NOx Burner Specifications* (accessed September 20, 2016); available from [www.maxoncorp.com/Files/pdf/S-lt-cyclomax.pdf](http://www.maxoncorp.com/Files/pdf/S-lt-cyclomax.pdf).



**ETS Response to Stakeholder Item #2-2:** If the Stakeholder's comments pertain to the Draft Technology Assessment for Rule 1147 Small and Low Emission Sources that was released for public review on January 29, 2016, then this comment does not seem applicable. The average cost effectiveness analysis performed for the three types of burner categories defined in the Draft Technology Assessment that ETS reviewed was calculated based on the cost of a replacement burner. Please see Section VII of this report and the "Cost and Cost Effectiveness" section of the Draft Technology Assessment.

**Stakeholder Item #2-3: Cost Effectiveness: Methods of Determining Cost Effectiveness** – The Stakeholder commented that a single cost effective methodology should be utilized for all 1147 devices and recommends that the 2006 SCAQMD Best Available Control Technology Guidelines, Part C: Policy and Procedures for Non-Major Polluting Facilities be used.

**ETS Response to Stakeholder Item #2-3:** In the February 2016 Draft Technology Assessment that ETS reviewed, SCAQMD did use the BACT guidelines for conducting the cost effectiveness analysis. Please see Section VII of this report and the "Cost and Cost Effectiveness" section of the Draft Technology Assessment. As noted in both of those sections, the lifetime costs of emissions were used as opposed to the 10 year life that is described in the BACT guidelines. According to SCAQMD this was based on comments from industry representatives that the full life of equipment should be considered in rule development analysis.

**Stakeholder Item #2-4: Cost Effectiveness: Maximum Acceptable Cost Effectiveness** – The Stakeholder commented that the actual cost effectiveness should be considered on a case-by-case basis and there should be a fixed maximum cost effectiveness level established so it would not disproportionately affect small industries. The Stakeholder recommended an absolute value of \$30,000/controlled ton.

**ETS Response to Stakeholder Item #2-4:** These Stakeholder comments are related to rule requirements and are not comments specific to the Draft Technology Assessment for Rule 1147 Small and Low Emission Sources. Of particular note, however, the Stakeholder recommended criteria of \$30,000, which is higher than the minor source BACT criteria of \$27,000 per ton of NO<sub>x</sub> for average cost effectiveness that was utilized as a screening tool in the Draft Technology Assessment for small equipment with NO<sub>x</sub> emissions of one pound per day or less.

**Stakeholder Item #2-5: Burners Mentioned: Turndown** – The Stakeholder commented that they have had good results with Eclipse Winnox burners for low temperature recirculation types of ovens and they have all passed source tests. The Stakeholder then expressed concerns about an inherent problem of limited turndown with the new "low NO<sub>x</sub>" burners and provided an example where pretesting of a Cyclomax burner by the Stakeholder produced unacceptable results and the burner had to be replaced despite being "classified and purchased as a low NO<sub>x</sub> burner."

**ETS Response to Stakeholder Item #2-5:** While the specific burner ratings, process conditions, and pretesting data from the Stakeholder's example case are unknown, the following general responses to the comments in Item #2-5 are offered by ETS. As previously stated in Section VI.I of this report, the ETS review of the SCAQMD Source Test Database noted that approximately 66% of the 140 tested ovens and dryers used Maxon burners and approximately 25% used Eclipse burners. An additional statistic noted from the ETS review is that out of the 140 tested units in the ovens and dryers equipment category with approved test results complying with the 30 ppm NO<sub>x</sub> limit, approximately 33% of the units had Maxon Cyclomax burners and approximately 19% of the units had Eclipse Winnox burners. There have also been more Maxon Cyclomax burners tested with approved test results complying with the 30 ppm NO<sub>x</sub> limit at "Low Fire" conditions than the Eclipse Winnox burners. As stated in the Draft Technology Assessment, both of those nozzle mix low NO<sub>x</sub> burner product lines for low temperature applications were developed about 15 years ago. The Stakeholder's suggestion that the Maxon Cyclomax burner is not a viable low NO<sub>x</sub> burner option for the low temperature oven category does not appear to ETS to be substantiated.

**Stakeholder Item #2-6: Burners Mentioned: Efficiency** – The Stakeholder commented that claims of increased efficiency with the installation of new low NO<sub>x</sub> burners may be false and that decreased efficiency may occur due to the manufacturers having to use more excess air to lower flame temperatures and thus reduce NO<sub>x</sub>. The Stakeholder stated the following, "if the existing burner is ratio fired and the new burner has to use 60 – 80% excess air to achieve the emission reductions, the total gas usage can actually increase. This becomes a problem if the existing burner is just marginally over the 1147 limit, the new burner that is installed can actually put more pollution into the air even with lower NO<sub>x</sub> values due to efficiency losses."

**ETS Response to Stakeholder Item #2-6:** These Stakeholder comments are vague in nature and the scenario described does not provide enough detail to accurately assess what the Stakeholder is trying to convey. These comments are not specific to the Draft Technology Assessment for Rule 1147 Small and Low Emission Sources.

**Stakeholder Item #2-7: Other Burners Mentioned in the Technology Assessment** – The Stakeholder comments that "other burners mentioned in the Technology Assessment (outside of the major manufacturers) are specific use burners and can only be used in very specific applications."

**ETS Response to Stakeholder Item #2-7:** Since a primary focus of the Draft Technology Assessment for Rule 1147 Small and Low Emission Sources was to evaluate the technical feasibility of retrofitting small and low emission units to comply with Rule 1147 emission limits, ETS found the discussion of all of the burners mentioned to be relevant to the assessment. All of the "other burners" mentioned and the information provided on them in the Technology Assessment combined with the Source Testing Database as of January 2015, indicated that the NO<sub>x</sub> emission limits in Rule 1147 are technically feasible and have been achieved in practice (with the exceptions noted therein). Since there are specific applications identified in Rule 1147 and prior public comments have dealt with the concerns regarding burner availability, then the mention of

those specific use burners and their applications certainly does seem to be relevant to the Draft Technology Assessment on the opinion of ETS.

**Stakeholder Item #2-8:** Section headings in the letter labelled “**Enforcement Considerations**”, “**Rule Compliance Date Issues**”, “**PTE**” and “**Mitigation Fee**”

**ETS Response to Stakeholder Item #2-8:** These sections are related to Rule 1147 compliance, enforcement, and potential future rule amendments and are not comments specific to the Draft Technology Assessment for Rule 1147 Small and Low Emission Sources.

### **C. Stakeholder Item #3 – Furnace Dynamics, Inc.**

Stakeholder Item #3 (Attachment C-3) from Furnace Dynamics, Inc. contains a one page sheet titled “SCAQMD Minor Source BACT Cost Effectiveness Calculation.” The sheet has cost effectiveness calculations performed for a Smokehouse Afterburner listed as being rated at 260,000 Btu/hour.

**ETS Response to Stakeholder Item #3:** This item appears to have already been addressed on page 3-10 of the Draft Technology Assessment in the section titled “Afterburner Controlling Smoke and Odors from Smokehouse”; however, ETS would like to point out the following details:

- In the Smokehouse Afterburner example presented in the Draft Technology Assessment, the operating schedule of the equipment was confirmed with the company owner by an SCAQMD inspector to be 12 hours per day for three days a week and 4 hours per day for two days a week (44 hours total per week) as opposed to 1.55 hours per day for 5 days per week (7.75 hours total per week) as found in the Furnace Dynamics, Inc. Cost Effectiveness Calculation in Attachment C-3.
- In Attachment C-3 under the heading of “Equipment Costs”, the Stakeholder has costs for the following items: permit to construct fee (\$2,200), source test evaluation fee (\$611), and source test (\$3,000). In prior SCAQMD rule development studies, including those that ETS has been contracted as an independent consultant, the types of permitting and source testing fees included by the Stakeholder are typically not appropriate to include in the calculation of emission control equipment cost effectiveness. As stated in the Draft Technology Assessment, “compliance demonstration costs including emissions testing, recordkeeping and other costs beyond what is recommended by equipment manufacturers are included in the socioeconomic assessment for rule adoptions.”
- In Attachment C-3 under the heading of “Annual Costs”, the Stakeholder has a cost for an annual source test fee (\$100/yr). ETS does not believe that the inclusion of an annual source test fee is applicable or appropriate for the cost effectiveness analysis of a burner retrofit with a low NOx burner. Furthermore, upon review of Rule 1147, ETS found no requirement for source testing beyond the first year, so it is not appropriate to include that as a recurring annual cost.

- In Attachment C-3 under the heading of “Annual Costs”, there is a cost for periodic maintenance (\$400/yr). There was no documentation provided with the sheet to indicate what the annual maintenance costs related to the replacement of the existing burner with a new low NOx burner represents. Also, there was no evidence provided that the annual maintenance costs were above and beyond the costs for a non-compliant burner system; therefore, it is not appropriate to include those costs in the cost effectiveness calculations.
- The cost effectiveness calculations were performed using an equipment life of 10 years. For an afterburner such as this, ETS finds an equipment life of at least 20-25 years to be more appropriate.

#### **D. Stakeholder Item #4 – Furnace Dynamics, Inc.**

Stakeholder Item #4 (Attachment C-4) from Furnace Dynamics, Inc. contains a one page sheet titled “SCAQMD Minor Source BACT Cost Effectiveness Calculation.” The sheet has cost effectiveness calculations performed for an Afterburner listed as being rated at 5,000,000 Btu/hour.

**ETS Response to Stakeholder Item #4:** This item does not appear to be within the scope of the Draft Technology Assessment because the daily NOx emissions listed are 1.671 lbs/day. In addition, there is insufficient information provided to determine if the process, emissions, usage, operating hours, and other parameters are appropriate. Information from the owner’s application for permit would have been helpful. As stated in the synopsis of the SCAQMD Board Meeting on March 4, 2016, “the rule requires staff to conduct a technology assessment and report to the Board on the availability of burner systems and heating units for processes with NOx emissions of one pound per day or less”. The same comments provided above in Stakeholder Item #3 regarding additional fees that should not be included in the cost effectiveness calculations and the utilization of an equipment life of 20-25 years as opposed to 10 years are also applicable to this item (Stakeholder Item #4).

A summary of the information received from Rule 1147 Stakeholders subsequent to the Rule 1147 Task Force Meeting and by the August 23, 2016 deadline may be found in Appendix D and copies of the five input items received from the Stakeholders are located in Attachments D-1, D-2, D-3, D-4, and D-5. Brief summaries of Stakeholder Item #’s 5-9 and the ETS responses are provided below:

#### **E. Stakeholder Item #5 – Industrial Process Equipment, Inc.**

Stakeholder Item #5 (Attachment D-1) from Industrial Process Equipment, Inc. contains the product information sheet on an immersion tube burner line (Titan Industrial Heating Systems, Immersion Tube Gas Burners). The Titan Immersion Tube Gas Burner was an example of a type of immersion burner line in the heated process tanks, evaporators and parts washers’ category of equipment that has been tested in the SCAQMD with NOx emission results below 60 ppm and was emailed to Industrial Process Equipment, Inc. by SCAQMD Staff at the Stakeholder’s request.

**ETS Response to Stakeholder Item #5:** The time and date stamp were not displayed on the original email from SCAQMD Staff to the Stakeholder. ETS has no specific comments on the exchange between Stakeholders regarding this item because the context is unclear.

## **F. Stakeholder Item #6 – Industrial Process Equipment, Inc.**

Stakeholder Item #6 (Attachment D-2) from Industrial Process Equipment, Inc. was supplied to ETS after a discussion with Stakeholders during the Rule 1147 Task Force Meeting held at SCAQMD Headquarters on August 3, 2016. ETS asked the Stakeholder if they could provide any specific cost information with regard to the immersion tube heating systems that were being discussed during the Task Force Meeting. The Stakeholder email stated that “an average burner replacement with a low nox burner is \$27,000 plus AQMD permits, Source testing and Down time costs being the line is shut down and any city permits. Could be more money if they do not have enough gas pressure in there plant to service the new burner.”

**ETS Response to Stakeholder Item #6:** There was no supporting documentation or detail provided along with the average burner replacement cost of \$27,000. The specific burner model number, burner size, burner cost, and installation costs were not supplied for verification by ETS.

## **G. Stakeholder Item #7 – Wirth Gas Equipment, Inc.**

Stakeholder Item #7 (Attachment D-3) contains a letter from Wirth Gas Equipment, a supplier of industrial combustion equipment, which conveyed three areas of concern regarding SCAQMD’s assessment of the “Burner availability and feasibility to retrofit units.”

**Stakeholder Item #7-1:** The first area of Stakeholder concern in the Draft Technology Assessment was regarding SCAQMD’s recommended “exemption for burners with a maximum rated capacity of 325,000 Btu/hour or less and “the delay or exemption for equipment that produces < 1lb. of NOx emissions per day.” The Stakeholder states that “if this is in fact the criteria I suggest they make the exemption for all processes/equipment at this level.”

**ETS Response to Stakeholder Item #7-1:** If ETS’ comprehension of the Stakeholder’s first area of concern is correct, then it appears that SCAQMD has already made recommendations in the Draft Technology Assessment to address the issues raised in Stakeholder Item #7-1. Please see Table ES-1 of this report for Staff Recommendation #1 which was based on technical feasibility and Staff Recommendation #5 which was based on the cost effectiveness evaluation.

**Stakeholder Item #7-2:** The second area of Stakeholder concern was Staff Recommendation #2 for the heated process tanks, evaporators and parts washers’ category of equipment in the Draft Technology Assessment. The Stakeholder stated that “in exempting existing units from meeting a < 60 ppm requirement they are

acknowledging that a good replacement piece of equipment does not exist. They state their testing has identified three types of heating systems that comply with the NOx emission limit and yet do not specifically identify what these systems are.....It is my opinion that not only a good replacement burner does not exist to meet the required firing conditions for immersion heating, but a good immersion burner that will meet a < 60 ppm NOx requirement for new units does not exist. The only unit I am aware of, which is available from a division of our principal company, requires firing tubes that are four times larger than current standard equipment. Using this “low NOx” option requires a tank that needs to be four times deeper to accommodate the tube.”

**ETS Response to Stakeholder Item #7-2:** After reviewing the Draft Technology Assessment, it is ETS’ understanding that the reason for Staff Recommendation #2 (see Table ES-1) was to address specific Stakeholder comments that it might not be technically feasible to retrofit certain types of existing heated process tanks with different burners that would meet the 60 ppm NOx emission limit. ETS reviewed both the Draft Technology Assessment, Appendix I (which discusses the heat process tanks, parts washers and evaporators category of equipment) and the SCAQMD Source Test Databases as of January 2015 (containing confidential information) and can confirm that the three types of heating systems that comply with the NOx emission limit of 60 ppm were in fact identified in Appendix I on pages I-2 and I-3.

Additionally, Appendix I of the Draft Technology Assessment identifies the new low NOx Maxon XPO burner for immersion heating that has been installed in new heated tanks with a 3,300,000 Btu/hour burner which demonstrated emissions of 4 ppm NOx at high fire and 34 ppm low fire in an SCAQMD approved emissions test. It should be noted that a comparison drawing presented to ETS by Industrial Process Equipment, Inc. in Stakeholder Item #8 depicts sizing information which contradicts this Stakeholder’s claim of the firing tube being as much as four times larger and the tank being four times deeper.

**Note:** Additional comments regarding an acceptable immersion tube heating burner for parts washer tanks that would meet a NOx emission limit of 60 ppm were also brought up by two other Stakeholders, Industrial Process Equipment, Inc. and Furnace Dynamics, Inc. and those comments may be found in Stakeholder Item #8 (see Attachment D-4) and Stakeholder Item #9 (Attachment D-5), respectively.

**Stakeholder Item #7-3:** The third area of Stakeholder concern is that “exempting existing units until the tank is modified or replaced encourages industry to continue to use old, outdated, in-efficient equipment as long as possible. Additionally it does not honestly address the need for new equipment and falsely supports the suggestion that equipment to meet this requirement in a properly engineered design exists.”

**ETS Response to Stakeholder Item #7-3:** It is unclear to ETS what type of suggestion, recommendation, or change to Staff Recommendation #2 from the Draft Technology Assessment for Rule 1147 that the Stakeholder is making in this third area of concern.

## **H. Stakeholder Item #8 – Industrial Process Equipment, Inc.**

Stakeholder Item #8 (Attachment D-4) was a packet of information from Industrial Process Equipment, Inc. that was mailed to ETS and received on August 23, 2016. The packet contained a letter titled “Attention: Rule 1147” and manufacturer information was provided on the following burners: Eclipse ImmersoJet (IJ), Maxon Tube-O-Therm, Maxon XPO Immersion, Titan Immersion Heater. Comparison drawings of heated washer tanks with an Eclipse IJ6 burner tube arrangement and a Maxon XPO burner, including a washer Btu/hour burner sizing worksheet were also included in the packet.

**Stakeholder Item #8-1:** The Stakeholder stated in the letter that “in one of the meetings they changed the oven burners from 20 ppm to 30 ppm due to the fact there were no burners that would comply.”

**ETS Response to Stakeholder Item #8-1:** The reference to a 20/30 ppm limit for oven burners does not appear to be relevant for the heated process tanks, evaporators and parts washers category of equipment since it has a completely different NOx emission limit in Rule 1147 (60 ppm or 0.073 lb/mmBtu). It should be noted; however, that ETS’ review of the SCAQMD Source Test Database as of January 2015 confirmed that the average NOx emission concentration for most ovens and dyers tested (140 units) was about 20 ppm with a range of 4 ppm to 30 ppm.

**Stakeholder Item #8-2:** The Stakeholder stated in the letter that “the washer burners did not get the same attention. I feel the tube fired washer burners should be exempt along with other burners in this category or change the rule to 100 PPM.”

**ETS Response to Stakeholder Item #8-2:** ETS was tasked with performing an independent review and analysis of the technical information presented in the Draft Technology Assessment for Rule 1147. In regard to the heated process tanks, evaporators and parts washers’ category of equipment, it is ETS’ understanding that SCAQMD Staff has already proposed a change to Rule 1147 based on Stakeholder concerns that it might not be technically feasible to retrofit an existing heated tank with different burners. The proposed change is to “delay compliance with the NOx emission limit for existing in-use heated process tanks, evaporators and parts washers with an integrated heated tank until such time the combustion system or tank is modified, replaced, or relocated.” See Staff Recommendation #2 in Section V. of this report.

It was verbally reported to ETS (by the Stakeholder) that the ideal parts washer systems are designed for 2 to 3 mmBtu/hour and testing of some existing units indicates that current NOx emission levels range from 90 to 100 ppm for the high pressure burner system identified; however, no specific data or source testing information was supplied to ETS by the Stakeholder for review of actual emissions. It was also reported in the Draft Technology Assessment, Appendix I (which discusses the heat process tanks, parts washers and evaporators category of equipment) that there are currently no emission test results available for the types of tube heating system burners that produce higher pressures and can fire into smaller diameter tubes. It is unclear to ETS why the test results have not been submitted for any of these types of burners to date.

It is ETS' understanding through discussions with SCAQMD and as stated in the Draft Technology Assessment for Rule 1147 that under both federal and state law, SCAQMD cannot exempt equipment when it has a requirement under an existing rule and/or there is technology available for new units to meet the limit. Furthermore, it is understood by ETS that for Title V facilities (major sources), these types of processes will have to meet the NO<sub>x</sub> emission levels that have been demonstrated by systems with the Maxon XPO burners (30-35 ppm) since the emission level has been achieved in practice. Even a limit of 60 ppm NO<sub>x</sub> is significantly less stringent than other SCAQMD emission limits for boilers, water heaters, and process heaters which can range from 6 to 20 ppm NO<sub>x</sub> at 3% O<sub>2</sub>.

**Stakeholder Item #8-3: Eclipse IJ Burner** - The Stakeholder provided product information and specification sheets from the Eclipse website on ImmersoJet (IJ) nozzle-mix tube-firing burners for Models IJ-8, Version 2 and IJ-6, Version 2 dated 4/5/2013. Also included were "Emissions Data Request" sheets from the Eclipse Home Office to the Stakeholder with guaranteed NO<sub>x</sub> emission values that were dated as 6/19/2001 to 6/22/2001 and ranged from 80 to 90 ppm @ 3% O<sub>2</sub>.

**ETS Response to Stakeholder Item #8-3:** ETS' prior experience indicates that many manufacturers are reluctant to guarantee burners to a lower NO<sub>x</sub> emission limit than is required by BACT or a rule and these guarantees were dated as being from June 2001. Were the "newer" Eclipse IJ Version 2 Models even available in 2001? ETS noticed a discrepancy between the Eclipse Product Datasheet for the ImmersoJet Burner, Model IJ-8, Version 2 that was provided in the packet from the Stakeholder (print date of 8/20/2016) and the Eclipse Emissions Data Request Sheet (dated 6/22/2001) with a NO<sub>x</sub> guarantee value of 80 ppm @ 3% O<sub>2</sub>.

According to the Eclipse Design Guide for Immersion Burners (ImmersoJet Series, Version 2), the number in the Model signifies the immersion tube size in inches (i.e., Model IJ-8 Burner has a tube size of 8").<sup>10</sup> The Product Datasheet provided by the Stakeholder for the Model IJ-8 Burner lists 2 available burner maximum input ratings (firing rates) of 3,500,000 Btu/hour with the packaged blower and 4,800,000 Btu/hour with the remote blower; however, the corresponding Eclipse Emissions Data Request Sheet (dated 6/21/2001) that was attached to the IJ-8 Product Datasheet lists the burner model as IJ-6 v2, the burner firing rate as 3,000,000 Btu/hour, and the burner location as being an 8" Immersion Tube. It should also be noted that the Eclipse Product Datasheet for the Model IJ-6, Version 2 supplied by the Stakeholder lists a maximum input of 2,500,000 Btu/hour for the high pressure packaged blower and the only option for a maximum input that is greater than or equal to 3,000,000 Btu/hour for the Model IJ-6 burner is the option with a remote blower, which has a maximum input of 3,600,000 Btu/hour. These discrepancies will be discussed further in Stakeholder Item #8-5.

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<sup>10</sup> *Honeywell Eclipse Product Catalog: Tube Firing Burners* (accessed September 20, 2016); available from [www.eclipsenet.com/products/immersojet/](http://www.eclipsenet.com/products/immersojet/).



**Stakeholder Item #8-4: Maxon XPO Immersion Burner Tube Diameter and Efficiency**

- The Stakeholder provided the Technical Catalog for the Maxon XPO Burners and stated that “problems with retrofits and even new applications for this type of new burner is the first 8 feet of the fire tube is 24” in diameter versus the Eclipse IJ 8” tube diameter, 3,000,000 Btu/hour.” The Stakeholder commented that the small tubes, such as the 8” diameter Eclipse IJ and Maxon Tube O Therm are more efficient (80%) than the old style larger diameter burners (69%).

**ETS Response to Stakeholder Item #8-4:** The Stakeholder claims regarding efficiency do not make sense to ETS. As stated in the Eclipse Immersion Burner (ImmersoJet Series, Version 2) Design Guide referenced in the ETS Response to Item #8-3,

“efficiency is determined by the effective tube length. The diameter of the tube has little influence on the efficiency. At a given burner input, the net input to the tank is higher for a longer tube than for a relatively short tube. It is customary to size conventional immersion tubes for 70% efficiency, a reasonable compromise between fuel economy and tube length. However, small diameter tubes occupy less tank space than conventional tubes, so their length can easily be increased to provide efficiencies of 80% or more.”

The Maxon XPO immersion burners, however, are a “new” style of indirect fired low temperature burners for use in liquid backed applications, including: water back heater, fire tube boiler, thermal oil heater, direct contact water heater, solution heating/tanks, and snow melters that will achieve ultra low NOx emissions while operating at 30% excess air level.<sup>11</sup> Due to the need for the burners and heat exchangers (tubes) to be designed as one integrated system in the heated process tank category of equipment and the fact that the burner tubes are typically a customer-supplied item, this is likely the reason that guarantees of emissions are not stated or implied in the burner manufacturer’s general product literature.

**Stakeholder Item #8-5: Comparison Drawing of Parts Washer Tank Layout with the Eclipse IJ6 Burner Tube Arrangement and a Maxon XPO Burner**

– The Stakeholder stated that the Maxon XPO burner is not a good solution for a new application since the tank would have to be significantly deeper, thus requiring more water and more heat input to heat the water. Additionally, the Maxon XPO heat exchange layout could not be well accommodated in wash tank applications, it has not been achieved in practice on enough pieces of equipment, and the wash tank applications should be exempted from the rule.

**ETS Response to Stakeholder Item #8-5:** The comparison drawing that was provided by the Stakeholder is labeled as “Eclipse Burner IJ 6” Immersojet Packaged Blower High

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<sup>11</sup> *Honeywell Maxon Product Catalog: Low NOx Burners* (accessed September 20, 2016); available from [https://www.maxoncorp.com/Directory/product\\_detail/XPO-Burner-Low-NOx/443/?ex=jqf0jt-li1r2l-efl51a.com/Directory/product\\_detail/OVENPAK-LE-natural-gas-lownox/113/](https://www.maxoncorp.com/Directory/product_detail/XPO-Burner-Low-NOx/443/?ex=jqf0jt-li1r2l-efl51a.com/Directory/product_detail/OVENPAK-LE-natural-gas-lownox/113/).

Pressure, Burner Output Max 3,000,000 BTU's"; however, the washer tank layout drawing for the Eclipse burner arrangement depicts an 8" diameter stainless steel tube in the parts washer as opposed to a 6" diameter tube that is typically indicative of the IJ 6 Model burner. Irrespective of the differences noted, the overall dimensions of the washer tank for the Eclipse IJ 6 burner tube arrangement in the Stakeholder's comparison drawing were 19'-11" long x 7'-5/8" wide x 39" tall, with a water level depth of 34".

The other wash tank on the comparison drawing provided by the Stakeholder was labeled as "XPO Maxon Burner, Burner Output Max 3,000,000 BTU's", with the fire tube of the XPO burner shown as 24" in diameter for the first 8' feet of tube length and the remaining tube depicted as 8" in diameter. The overall dimensions of the washer tank for the Maxon XPO burner tube arrangement were 19'-11" long x 8'-2 5/8" wide x 45" tall, with a water level depth of 40".

On the assumption that the design and sizing of the immersion tubes for each of the parts washer tanks was accurate, ETS noted the following between the layouts of the Eclipse IJ6 burner and the Maxon XPO burner:

- The overall length of both parts washers were identical at 19'-11"
- The parts washer layout for the Maxon XPO burner arrangement was 1'-2" wider than the overall width of the parts washer layout for the Eclipse IJ 6 burner
- The Maxon XPO burner tube depicted was 24" in diameter for the first 8' of tube length and the remaining tube length was 8" in diameter; however, the Eclipse IJ tube diameter depicted was 8" for the entire tube length. Note: The Maxon XPO Technical Catalog included by the Stakeholder indicated that the inside diameter of the fire tube for the 3,000,000 Btu/hour (maximum capacity) burner that was selected could be between 18 and 24" in diameter based on manufacturer suggested heat flux values (Btu/in<sup>2</sup>). ETS also noted in the Technical Catalog that for the 3,000,000 Btu/hour Maxon XPO burner the corresponding blast tube listed was 6" outside diameter by 4' in length.
- The parts washer overall height of the Maxon XPO burner layout depicted was 6" taller than the Eclipse IJ6 parts washer. There was also a 6" difference in water level depth between the Maxon XPO and Eclipse IJ6 parts washers.

The differences that ETS noted above between a parts washer tank with an Eclipse IJ6 burner and a parts washer tank with a Maxon XPO burner in the Comparison Drawing provided by Industrial Process Equipment, Inc. in Stakeholder Item #8 seem to contrast with the comments made by another Stakeholder in Item #7. The comments made by Wirth Gas Equipment, Inc. in Stakeholder Item #7 were the following: "The only unit I am aware of, which is available from a division of our principal company, requires firing tubes that are four times larger than current standard equipment. Using this "low NOx" option requires a tank that needs to be four times deeper to accommodate the tube."

Also in response to Stakeholder Item #8-5, the information and data presented by SCAQMD Staff in Appendix I of the Draft Technology Assessment regarding the Maxon XPO burner states that both heated process tanks and parts washers have been permitted

with this burner. It further states that an SCAQMD approved emissions test on one of these systems (required for Regulation XIII and new source review) with a 3,300,000 Btu/hour burner had emissions of 4 ppm NO<sub>x</sub> at high fire and 34 ppm at low fire. This data suggests to ETS that for new systems, the emission limit of 60 ppm is certainly technically feasible and has been “achieved in practice”.

**Stakeholder Item #8-6: Titan Heater** – Information was supplied by the Stakeholder from the Titan Industrial Heating Systems website with a paragraph highlighted on Downdraft Burners which stated that “the down draft gas burner system is for heating: Phosphates Waste Water Hot Seal tanks and many other applications.” The Stakeholder comments related to the Titan Heater were that the maximum firing rate is 450,000 Btu/hour. The Stakeholder then stated that “most of our washers are 2,000,000 Btu/hour or more. The tube diameter is 4” to 6”. You would need 5 burners and tubes to do 2,000,000 Btu/hour. Not a practical or efficient design... This is an old style application. Goes back to the first washer ever built.”

**ETS Response to Stakeholder Item #8-6:** ETS does not understand the relevancy of the Stakeholder comments on the Titan burner to the Rule 1147 Draft Technology Assessment. Appendix I of the Draft Technology Assessment lists the burner manufactured by Titan as one of many manufacturers of burners for the most common type of heating tube system that typically has tubes that vary from about 4” up to 14” in diameter (one of the five different types of tank heating systems described in Appendix I). The Draft Technology Assessment then states that three of the manufacturer systems within this type of tank heating system, which all use a burner with a maximum rating of 350,000 Btu/hour and 4 inch diameter heating tubes, have been tested with NO<sub>x</sub> emissions that range between 30 to 55 ppm and meet the NO<sub>x</sub> emission limit of 60 ppm for this category of equipment. ETS did not find that the Draft Technology Assessment implied that this type of burner would necessarily be the most suitable design for the Stakeholder’s specific application as described above. That type of tube heating system was also not described as using burners which produce higher pressures and can fire into smaller diameter tubes such as the part washer burners that the Stakeholder is referring to. However, ETS does find it noteworthy that an “old style” partial premix burner system, such as the Titan burner, was capable of achieving NO<sub>x</sub> emissions of less than 60 ppm for the specific application in which it was tested.

**Stakeholder Item #8-7: BTUs out of California Information** – This Stakeholder item contained a list (labelled “BTUs out of California Information”) of California companies that reportedly have shut down or moved out of California due to the costs of doing business in the state.

**ETS Response to Stakeholder Item #8-7:** While ETS recognizes the economic impacts of companies moving or going out of business, the supplied information could not be analyzed as a part of the review of the Draft Technology Assessment for Rule 1147 Small and Low Emission Sources.

**NOTE:** Additional comments regarding an acceptable immersion tube heating burner for parts washer tanks that would meet a NO<sub>x</sub> emission limit of 60 ppm were also

brought up by two other Stakeholders, Wirth Gas Equipment, Inc. and Furnace Dynamics, Inc. and those comments may be found in Stakeholder Item #7 (see Attachment D-3) and Stakeholder Item #9 (Attachment D-5), respectively.

## **I. Stakeholder Item #9 – Furnace Dynamics, Inc.**

Stakeholder Item #9 (Attachment D-5) contains an e-mail with the subject line "Tech Assessment" and an attachment file titled "Tech Assessment Complete.pdf" (16 pages). The file included a write-up with regard to the SCAQMD Draft Technology Assessment, a comprehensive evaluation of a company that is now in compliance with the rule (Exhibits A through I of Stakeholder file), additional comments regarding a couple of other applications, and a cost effectiveness spreadsheet for an auto body spray booth (Exhibit J of Stakeholder file). Note: Stakeholder Item #9, Exhibits A - J were excluded from Attachment D-5 in this report due to the Stakeholder's request to maintain company confidentiality regarding financial information.

**Stakeholder Item #9-1: Technology Assessment** – The Stakeholder expressed concern over the vast array of devices in Rule 1147 that are covered by the Technology Assessment and a database received by Staff containing approximately 270 categories of equipment and approximately 6,500 devices. The Stakeholder concerns were stated in regard to the "limited ETS contract value" which would make it "impossible to evaluate a large number of sources."

**ETS Response to Stakeholder Item #9-1:** It appears to ETS that the Stakeholder concerns over 270 categories of equipment covered by the "Technology Assessment" are in reference to a different earlier document or search of the SCAQMD permit database and not the February 2016 version of the Draft Technology Assessment for Rule 1147 which ETS was tasked with reviewing. The February 2016 Draft Technology Assessment clearly states that "ten major categories of equipment were evaluated through the technology assessment" with the focus of the report on "equipment with NOx emissions of one pound per day or less." In addition, it is ETS' understanding that it would not be appropriate to do individual cost effectiveness calculations for pieces of equipment on a case-by-case basis as part of a rule requirement; rulemaking uses averages for calculating emissions for categories of equipment. Furthermore, the February 2016 Draft Technology Assessment described in detail the methodology utilized, including writing out the equations for the cost effectiveness analysis of replacing burner systems in three types of burner systems for small equipment with estimated emissions of one pound per day or less for which ETS was tasked with reviewing. Within each of the three types of burner systems defined (low temperature ovens and dryers, high temperature applications, and spray booths), the Draft Technology Assessment described the range of typical replacement burner and combustion system component costs from confidential information provided by the vendors for the various types of equipment that would be subject to Rule 1147.

**Stakeholder Item #9-2: General Comments Regarding the Technology Assessment**– There were 3 separate comments discussed by Furnace Dynamics, Inc. in Item #9-2 as listed below:

**Item #9-2-a:** The Stakeholder expressed concerns regarding burner manufacturers providing guarantees for NOx emissions on a burner in a forge company furnace; however, none would guarantee an acceptable uniformity survey required by the aerospace industry.

**ETS Response to Stakeholder Item #9-2-a:** This item does not appear to be a comment on the Rule 1147 Draft Technology Assessment dated February 2016.

**Item #9-2-b:** The Stakeholder had concerns regarding an acceptable immersion tube burner that can be used in wash tanks.

**ETS Response to Stakeholder Item #9-2-b:** These comments were very similar in nature to comments made by two other Stakeholders, Wirth Gas Equipment, Inc. and Industrial Process Equipment, Inc., in regard to the heated process tanks, evaporators and parts washers' category of equipment. The ETS responses may be found in Stakeholder Item #'s 7 and 8 above.

**Item #9-2-c:** The Stakeholder included a cost effectiveness spreadsheet that relates to a typical auto body spray booth retrofit application with a comparison of "PTE" and "Actual" cost effectiveness calculations (Exhibit J).

**ETS Response to Stakeholder Item #9-2-c:** It is unclear why the Stakeholder included cost effectiveness calculations for an auto body spray booth retrofit because a recommendation was already presented by SCAQMD Staff in the Draft Technology Assessment for the spray booth category of equipment in consideration of cost effectiveness. The Staff recommendation was to delay compliance with the NOx emission limit for existing in-use spray booths until the heating is modified, relocated or replaced (Staff Recommendation #5). ETS did note in the Stakeholder cost effectiveness spreadsheet, however, that the total equipment cost to retrofit an existing auto body spray booth to meet the Rule 1147 NOx emission limit was listed as \$26,000, which is slightly less than the Draft Technology Assessment range of \$30,000 to \$50,000.

**Stakeholder Item #9-3: ETS Consulting** – The Stakeholder comments in this section of Attachment D-5 were regarding a discussion during the Rule 1147 Task Force Meeting held on August 3, 2016. The comments pertained to the Stakeholder's opinion of how the emissions values and cost effectiveness for Rule 1147 should have been conducted from the outset of rule development.

**ETS Response to Stakeholder Item #9-3:** - This Stakeholder comments are not related to the February 2016 Draft Technology Assessment for Rule 1147 Small and Low Emission Sources that ETS was tasked with reviewing.

**Stakeholder Item #9-4: Pretesting to Determine the Current State of Compliance** – The Stakeholder commented that over the last 3 years they have conducted approximately 190 pretests with the most advanced emission analyzers on the market (Testo 350) with 98% of the tests conducted on Rule 1147 devices.

**ETS Response to Stakeholder Item #9-4:** ETS reviewed the pretesting data that was presented with Stakeholder Item #9 (Exhibit A) and had follow-up questions and clarifications for the Stakeholder to gain a better understanding of how the pretesting data was utilized for the starting NOx emissions in the “Actual” cases of cost effectiveness conducted by the Stakeholder. Responses from the Stakeholder to the ETS follow-up questions were received in a timely fashion; however the follow-ups continued until September 12, 2016. ETS understands the importance of proper tuning and regular maintenance on combustion equipment to ensure that optimal conditions are being achieved and the utilization of portable analyzers may be a useful tool for many equipment owners to assess if compliance with Rule 1147 can be achieved with existing burners; however, the use of the pretesting data as the starting NOx emissions in the cost effectiveness for the “Actual” cases does not seem appropriate and will be addressed in additional ETS responses below.

**Stakeholder Item #9-5: Facility Evaluation, Cost Effectiveness, and Actual Numbers vs. Default Values** – The Stakeholder selected a facility where extensive pretesting was conducted in order to determine the compliance status for a specific facility and provide a basis for them to embark on a retrofit program prescribed under Rule 1147. The Stakeholder acquired a spreadsheet of the facility costs associated with each retrofit conversion that was determined as being needed based upon the pretesting data and the hours per day of operation. The Stakeholder then used the values as a basis of comparing the existing emission values and thus the overall reduction to calculate the cost effectiveness of each device. The average firing rates of the ovens, derived from actual source testing data, were used as the average firing rates of each of the ovens evaluated. The Stakeholder stated that it was important to understand that the indicated average was relevant to the understanding of how the equipment actually operates and then gave a description of that operation (see Attachment D-5).

The Stakeholder provided cost effectiveness charts for a specific facility and individual equipment where upgrades (burner retrofits) to their equipment were made and source testing was successfully completed. The Stakeholder stated “to assure consistency with staff’s methodology, I created a spreadsheet using the same formulas found in the Districts Minor Source BACT Guidelines and the same values that are illustrated in the guidelines to assure the methods are consistent with what staff used in the initial evaluation. Staffs’ and our numbers compare to the exact same dollar per controlled ton.”

The Stakeholder also felt it important to provide actual numbers that represented actual information relating to specific devices. The Stakeholder stated that he had “used the actual starting ppm for each device to show a comparison to the Districts default values. The approach was to look at the actual daily use in hours then use a value that would represent the District’s approach of using 100% firing rate for the normal hours of operation and also using the default emission factor that the staff used of 130#/MMcf natural gas (101.4 ppm).

**ETS Response to Stakeholder Item #9-5:** ETS conducted an extensive review of Exhibits A – I provided by the Stakeholder (which contained facility confidential

information and were not included as an attachment to this report). It appears to ETS that the Stakeholder comments regarding the creation of a spreadsheet “to assure the methods are consistent with what staff used in the initial evaluation are in reference to an evaluation conducted by SCAQMD for Rule 1147 adoption in 2008. It is ETS’ opinion that the Stakeholder’s cost effectiveness calculations for individual pieces of equipment **are not consistent** with the cost effectiveness analysis presented by SCAQMD in the February 2016 version of the Draft Technology Assessment for Rule 1147 which ETS was tasked with reviewing.

After conducting an extensive review of the February 2016 version Draft Technology Assessment cost effectiveness calculations, ETS could not determine where the use of a default emission factor of 130#/MMcf natural gas (101.4 ppm) as commented by the Stakeholder was applicable. ETS did note in Appendix C, page C-2 of the Draft Technology Assessment dated February 2016 that “most rule 1147 emission test results are adjusted by the testing company or SCAQMD Staff to address issues with a test’s acceptable range or with other testing and calculation issues. As a result, most test results can demonstrate compliance but cannot be used to accurately estimate concentration or mass emissions from individual units and categories of equipment.”

The Stakeholder performed side-by-side cost effectiveness calculations with a column on the left of each page listed as “PTE” and a column on the right of each page listed as “Actual” for 6 pieces of equipment that would fall under the category of Small Ovens and Dryers as described in various sections of the Draft Technology Assessment. The NOx emission reductions for the “PTE” cost effectiveness calculations were calculated from the starting NOx emissions of 101.4 ppm and the “modified source emissions” of 30 ppm using 100% firing rate for the normal hours of operation for each of the 6 pieces of equipment. The NOx emission reductions for the “Actual” cost effectiveness calculations were calculated based on the Stakeholder pretesting data and “modified source emissions” of 30 ppm using an average firing rate for the normal hours of operation for the 7 pieces of equipment. Note: For calculating actual emission reductions, the Stakeholder should have used actual low NOx burner emissions instead of a default emission limit of 30 ppm. Actual low NOx burner emissions provided by the Stakeholder were in the range of approximately 7 to 20 ppm NOx.

The focus of the February 2016 Draft Technology Assessment was on processes with NOx emissions of one pound per day or less as called for on page 1147-16 of SCAQMD Rule 1147 – NOx Reductions from Miscellaneous Sources (Adopted December 5, 2008) (Amended September 9, 2011). For the cost effectiveness analysis performed for both the low temperature ovens and dryers and the high temperature applications, SCAQMD started with the NOx emissions of one pound per day and then performed the cost effectiveness calculations using NOx emission reductions in increments of 0.25 pounds per day for the following cases: 0.25, 0.50 and 0.75 pounds per day. Note: The initial NOx emissions from the equipment examples provided by the Stakeholder appeared to be above one pound per day from equipment that was more than 20 years old.

In addition, it is ETS' understanding that it would not be appropriate to do individual cost effectiveness calculations for pieces of equipment on a case-by-case basis as part of a rule requirement; rulemaking uses averages for calculating emissions for categories of equipment. Based on the responses given above, ETS does not believe that the Stakeholder's cost effectiveness calculations affect the recommendations that were made by SCAQMD Staff in the February 2016 Draft Technology Assessment. However, there were several key items that were gleaned from ETS' review of the all of the Exhibits provided by the Stakeholder in Item #9 that will be listed at the end of this section.

**Stakeholder Item #9-7: Cost Effectiveness Methodologies** – The Stakeholder commented that “there were multiple values illustrated in the technology assessment. They varied in duration of the starting and ending points. Some had a 10-year cost effectiveness value and some had 15 year or even a 20 year criteria used for the evaluation of cost effectiveness.” The Stakeholder believes a singular methodology should be utilized for determining cost effectiveness and should be uniform for all Rule 1147 devices, should be conducted on a case-by-case basis, and the Stakeholder has offered to assist in streamlining this effort.

**ETS Response to Stakeholder Item #9-7:** The cost effectiveness values that ETS reviewed in the February 2016 version of the Draft Technology Assessment for Rule 1147 Small and Low Emission Sources for the three types of burner systems previously defined utilized the following equipment lives:

- Low Temperature Ovens and Dryers – 20 year equipment life
- High Temperature Applications – 25 year equipment life
- Spray Booths – 20 year equipment life

ETS could not find either a 10 year or a 15 year cost effectiveness value in the “Technology Assessment” in the February 2016 Draft Technology Assessment.

**Stakeholder Item #9-10: Conclusions:** – The Stakeholder stated that the “Technology Assessment is rather comprehensive in nature. However, we find fault in the cost effectiveness numbers due to staffs’ using default numbers and potential to emit. We have provided spreadsheets that can be evaluated to determine what constitutes one pound per day of NOx based on BTU input and hours of operation at a number of average BTU inputs from PTE to an average of 20% of PTE.”

**ETS Response to Stakeholder Item #9-10:** ETS would agree that the February 2016 version of the Draft Technology Assessment for Rule 1147 Small and Low Emission Sources (found in Appendix A of this document) was very comprehensive in nature and detailed the methodologies that were utilized; however, the Stakeholder's comments do not correspond with how the cost effectiveness calculations were actually conducted by SCAQMD Staff in the February 2016 Draft Technology Assessment that was the primary focus of the ETS review.



**ETS Overall Comments on the Review of Stakeholder Exhibits A - J:**

- The Stakeholder used a 10 year equipment life for all of the cost effectiveness calculations presented to ETS. ETS does not believe that the 10 year equipment life utilized by the Stakeholder in performing the cost effective calculations for low temperature ovens/dryers and a spray booth in Exhibits D – I is appropriate for these applications. ETS believes that a 20 year equipment life would be more appropriate for these categories of equipment. Modifying the Stakeholder’s cost effectiveness calculations to a 20 year equipment life would reduce the cost effectiveness (in \$ per ton) for the equipment evaluated by roughly 50%.
- The rating of the low NOx burners purchased for the retrofit at the facility evaluated by the Stakeholder ranged from 1,000,000 to 2,000,000 Btu/hour. Cost information presented by the Stakeholder for those burners would be applicable to the “Burner Cost and Cost Effectiveness for Low Temperature Ovens and Dryers” section of the Draft Technology Assessment for Rule 1147 Small and Low Emission Sources (pages 3-5 to 3-7). Without revealing any of the facility confidential information provided by the Stakeholder to ETS or the confidential information in the confidential burner costing information provided by SCAQMD to ETS, the following comments could still be made by ETS:
  1. Under the heading of “Equipment Costs” in Exhibits D - I, the Stakeholder included varying costs for the following in each cost effectiveness evaluation: permit to construct fee, source test evaluation fee, and source test. As previously stated, ETS does not believe that these costs are appropriate to include in the cost effectiveness calculations for Draft Technology Assessment for Rule 1147 Small and Low Emission Sources.
  2. Note to Stakeholder: The costs listed in columns labeled “Protocol Fees” and “Performance Test Plan Evaluation” in Exhibit C were added together and totaled in the column labeled “Combined Proto and ST Fees”; however all 3 of those columns of costs were then summed to arrive at the total in the column labeled “Individual Device Costs”. Therefore, the “Protocol Fee” and “Performance Test Plan Evaluation” cost columns are being double counted in the sum total for the “Individual Device Cost” column for every piece of equipment listed. As previously stated, however, ETS does not believe that those costs are appropriate to include.
  3. With the exclusion of the Stakeholder fees listed in #1 above, ETS reviewed the Stakeholder “Burner Cost” and “Installation” costs columns for new low NOx burners ranging from 1,000,000 to 2,000,000 Btu/hour. With the exception of one piece of equipment, the sum of the “Burner Cost” and “Installation” (which be the total installed equipment cost) for 6 different ovens in Exhibit C were within the range of total installed equipment costs evaluated from the SCAQMD costing information. In fact, the total installed equipment costs for those 6 ovens were below \$30,000 (the estimated cost for installing a low NOx burner in small

ovens and dryers found on page 3-6 of the Draft Technology Assessment).

4. After considerable follow-up with the Stakeholder, it is still not understood by ETS why the Stakeholder used average firing rates for the determination of both the starting emissions and the modified source emissions to arrive at the emissions reduction. The following example explains how an “Actual” Stakeholder cost effectiveness calculation for a low temperature oven appears to be grossly overstated with the “DCF Cost Per Ton Reduced” calculated by the Stakeholder as \$212,921.
  - The pretest starting emissions of 87 ppm (original burner) and an average BTU input of 300,000 Btu/hour (determined from a gross input of 1,000,000 Btu/hour multiplied by an average BTU input of 30%) were used to calculate the annual starting emissions. Note: Through ETS follow-up questions, the Stakeholder indicated that the average BTU input of 30% was derived from the source test summary sheets listing a maximum input and the average firing rate. However, the Stakeholder indicated that the original burner rating was 600,000 Btu/hour and it was retrofitted with a new Eclipse Winnox burner rated at 1,000,000 Btu/hour. The source test summary sheets provided by the Stakeholder listing the average BTU input of 30% were for the new Eclipse Winnox burner rated at 1,000,000 Btu/hour burner for the “Low Load” source testing. This methodology does not seem logical.
  - The modified source emissions of 30 ppm (new Eclipse Winnox burner) and an average BTU input of 300,000 Btu/hour (determined from a gross input of 1,000,000 Btu/hour multiplied by an average BTU input of 30%) were used to calculate the annual reduced emissions. In presenting an “Actual” case following the Stakeholder’s methodology, it would seem to ETS that the actual “Low Load” NOx emissions that were achieved of 6.15 ppm @ 3% O<sub>2</sub> should have been utilized. This would result in higher NOx emissions reduced over the life of the equipment and a significantly lower DCF. Note: The “High Load” source testing provided to ETS indicated NOx emissions of 6.34 ppm @ 3% O<sub>2</sub> with a “Fire Rate” of 410,000 Btu/hour.
  - ETS noted that the original burner had a rating of 600,000 Btu/hour and the new retrofit burner (Eclipse Winnox) had a rating of 1,000,000 Btu/hour. During the ETS manufacturer data review in Section VI.I of this document, ETS noted that the Eclipse Winnox burners were available in 8 sizes with the smallest burner size rated at 550,000 Btu/hour (Eclipse Model Number

WX0050).<sup>12</sup> Additional review of the Eclipse Winnox Model WX0050 Datasheet by ETS indicates a maximum burner input range from 470,000 to 650,000 Btu/hour depending upon the type of blower selected. While ETS can't comment on the specific design reasons for oversizing the new retrofit burner, it does not seem appropriate to include a higher cost for that in the Stakeholders "Actual" cost effectiveness calculations.

5. After ETS obtained the follow-up items requested from the Stakeholder, there were numerous inconsistencies noted between the equipment names, data supplied on the original burner ratings, the new retrofit burner ratings, and the burner ratings that were then utilized in the cost effectiveness calculations for the specific equipment names. In addition, there was insufficient information provided to determine if the process, emissions, usage, operating hours, and other parameters utilized were appropriate.

## **IX. ETS RESPONSES TO INFORMATION RECEIVED FROM RULE 1147 STAKEHOLDERS AFTER AUGUST 23, 2016 DEADLINE**

A summary of the information received from Stakeholders after the August 23, 2016 deadline may be found in Appendix E. The information received by ETS came from the following two Stakeholders: 1) Industrial Process Equipment, Inc. and 2) Furnace Dynamics, Inc. Brief summaries of Stakeholder Item #'s 10-12 and the ETS responses are provided below:

### **A. Stakeholder Item #10 – Industrial Process Equipment, Inc.**

Stakeholder Item #10 (Attachment E-1) contains an undated letter that was received by email from Industrial Process Equipment, Inc. on September 2, 2016. The undated letter was addressed to Wayne Barcikowski at SCAQMD from Jim Waggoner of Industrial Process Equipment, Inc. The Stakeholder concerns were regarding the amount of burners that needed to be changed by July 2012. The Stakeholder also suggested rule amendments for "the added categories that work for the different applications" and for burners that are on the market and have been achieved in practice for a minimum of one year. The final page of the Stakeholder letter recommends "getting with the burner manufacturers to see if the below are correct categories that they can make burners for and to what type of burner will meet the PPM requirements. When can they meet the PPM requirements and then implement them into the rule."

**ETS Response to Stakeholder Item #10:** The items in this letter do not appear to be applicable to the specific ETS tasks or comments on the February 2016 Draft Technology Assessment for Rule 1147 Small and Low Emission Sources.

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<sup>12</sup> *Honeywell Eclipse Product Catalog: Air Heating Burners* (accessed September 20, 2016); available from [www.eclipsenet.com/products/winnox/](http://www.eclipsenet.com/products/winnox/).

## **B. Stakeholder Item #11 – Industrial Process Equipment, Inc.**

Stakeholder Item #11 (Attachment E-2) contains an email from Industrial Process Equipment, Inc. dated September 2, 2016. The email also contained an attachment file of a CAD layout drawing of a conveyORIZED powder coat system. The CAD drawing, however, was not included as an attachment in this report since it contained client-specific details for a system that is located in Texas.

The CAD drawing is dated as 11/11/15 and is a ConveyORIZED Powder Coat System for a specific client with the following: “a Spray Power Washer in the front that goes to a Dry Off Oven, then cools down to Two Powder Booths, and then to the Cure Oven, and then to the Unload Area.”

**ETS Response to Stakeholder Item #11:** It is ETS’ understanding that the CAD layout drawing was provided by the Stakeholder to convey to ETS the location of the parts washer tank (which is a piece of equipment that falls under Rule 1147) with respect to the layout of the entire system. ETS appreciates the additional Stakeholder information; however, the drawing does not appear to be applicable to the specific ETS tasks or comments on the February 2016 Draft Technology Assessment for Rule 1147 Small and Low Emission Sources.

## **C. Stakeholder Item #12 – Furnace Dynamics, Inc. (Energy Services Corporation)**

Stakeholder Item #12 is an email from Anthony Endres of Furnace Dynamics, Inc. that was received by ETS on September 20, 2016. The email contained an undated document from Anthony Endres of Energy Services Corporation addressed to Wayne Barcikowski at SCAQMD (Attachment E-3). The letter discusses the applicability of the 60 ppm NO<sub>x</sub> emission limit to different types of metal melting and heat treating furnaces. The commenter proposes each type of furnace should have a different NO<sub>x</sub> emission limit. The letter also contains a general discussion of BACT for new metal melting and heat treating furnaces that proposes that each type of furnace should have its own BACT limit. Finally, the Stakeholder recommends the use of a pounds per hour basis for determining compliance based on the pounds per hour emitted at 100% for a given burner or classification of equipment. Note: All other Stakeholder items received from Anthony Endres were indicated with the company Furnace Dynamics, Inc.; however, Attachment E-3 was from Energy Services Corporation.

**ETS Response to Stakeholder Item #12:** The items in this document do not appear to be applicable to the specific ETS tasks or comments on the February 2016 Draft Technology Assessment for Rule 1147 Small and Low Emission Sources.

## **X. ETS COMMENTS ON RULES CHANGES UNDER CONSIDERATION BY SCAQMD**

In conclusion, ETS concurs with the five Rule 1147 changes under consideration as found in Executive Summary Table ES-1 and would like to offer the following additional recommendation for Rule 1147:

Change the NO<sub>x</sub> emission limit from 30 ppm to 60 ppm in the afterburner technologies for processes that operate at or below 800°F. This new NO<sub>x</sub> limit of 60 ppm will be the same compliance limit required for higher temperatures and therefore the same limit at any process temperature in the afterburner technologies category. The burner utilized for these types of applications is not designed to achieve 30 ppm (ETS Recommendation #6).

## **APPENDIX A**

### **SCAQMD DRAFT TECHNOLOGY ASSESSMENT FOR RULE 1147 SMALL AND LOW EMISSION SOURCES DATED FEBRUARY 2016**

BOARD MEETING DATE: March 4, 2016

AGENDA NO. 25

PROPOSAL: Rule 1147 Technology Assessment

SYNOPSIS: At its September 9, 2011 meeting, the SCAQMD Board amended Rule 1147 – NOx Reductions from Miscellaneous Sources. The rule requires staff to conduct a technology assessment and report to the Board on the availability of burner systems and heating units for processes with NOx emissions of one pound per day or less. The draft technology assessment considers potential changes to Rule 1147 for specific categories of equipment based on analysis of technical feasibility and cost effectiveness. Staff has proposed to hire a third party to review the draft Technology Assessment, report findings to Rule 1147 stakeholders and incorporate the reviewer's comments. This action is to receive and file the draft Rule 1147 Technology Assessment.

COMMITTEE: Stationary Source, November 20, 2015; February 19 and January 22, 2016, Reviewed

RECOMMENDED ACTION:  
Receive and file.

Barry R. Wallerstein, D. Env.  
Executive Officer

PF:JC:GQ:WB

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### **Background**

Rule 1147 – NOx Reductions from Miscellaneous Sources, was adopted by the SCAQMD Board on December 5, 2008 with a compliance schedule phased in over 10 years. Rule 1147 incorporates two control measures of the 2007 AQMP: CMB-01 – NOx Reductions from Non-RECLAIM Ovens, Dryers and Furnaces and MCS-01 – Facility Modernization. Control Measure MCS-01 proposed that existing in-use equipment meet best available control technology (BACT) emission limits in place at the time the AQMP was adopted. Control Measure CMB-01 proposed emission NOx limits in the range of 20 ppm to 60 ppm for ovens, dryers, kilns, furnaces and other

combustion equipment. Emission reductions from the equipment addressed by Rule 1147 and Control Measure CMB-01 of the 2007 AQMP were also proposed in prior AQMPs.

Rule 1147 was amended September 9, 2011 to delay implementation dates up to two years, remove a requirement for fuel or time meters and provide compliance flexibility for small and large sources. In addition, the rule includes a requirement for a technology assessment on the availability of low NO<sub>x</sub> burner systems for processes with NO<sub>x</sub> emissions of one pound per day or less and that are not typically subject to a BACT requirement as new sources. The technology assessment also includes an evaluation of cost and cost effectiveness for small and low emission sources.

### **Technology Assessment**

Initially the SCAQMD technology assessment targeted sources in which burner technology was either not available or the retrofit cost was comparable to the cost of replacing the unit. Several categories of equipment were identified and removed from Rule 1147 and the requirement for a permit through the May 2013 amendments to SCAQMD Rules 219 and 222. Staff continued its technical evaluation and developed Rule 1153.1 – Emissions of Oxides of Nitrogen from Commercial Food Ovens to move existing in-use food ovens, roasters and smokehouses from Rule 1147 into their own rule. Rule 1153.1 was adopted on November 7, 2014 and provided more appropriate temperature ranges for defining emission limits, food oven specific emission limits, later compliance dates and an exemption for small units.

The last phase of the technology assessment focuses on the remaining categories of small and low emission equipment that were not addressed through the Rule 219, 222 and 1153.1 rulemaking efforts. While the focus of this report is on equipment with NO<sub>x</sub> emissions of 1 pound per day or less, the report also includes information and analysis applicable to larger units. This information is provided in order to address stakeholders' concerns regarding the availability of technology for larger equipment.

This assessment utilizes information on affected equipment from the SCAQMD permit system, New Source Review and Rule 1147 emissions testing programs, and from discussions with equipment and burner manufacturers, affected businesses, consulting engineers and industry representatives. The technology assessment provides information on the types and number of equipment affected by Rule 1147, emissions characteristics of this equipment and estimates of the cost and cost effectiveness of replacing existing older combustion systems. This information provides insight into compliance and affordability challenges faced by businesses affected by Rule 1147.

With the exception of a few categories of equipment, the technology review demonstrates that low NO<sub>x</sub> burner systems are available for every category of equipment subject to Rule 1147 and have been since the late 1990's. However, staff has



identified the following three types of equipment for which burners are not readily available or cannot be retrofitted: 1) low temperature ovens and dryers with heat inputs of less than 325,000 Btu per hour (0.325 mmBtu/hour); 2) existing heated process tanks, evaporators and parts washers; and 3) low temperature burn-off ovens and incinerators.

### **Cost and Cost Effectiveness**

The staff report for the adoption of Rule 1147 in 2008 reviewed costs for a wide range of equipment with heat inputs from less than 1 million Btu per hour to over 20 million Btu per hour. That analysis of cost and cost effectiveness was averaged over a wide range of burner sizes. However, most of the equipment subject to Rule 1147 requirements have heat inputs less than 4 million Btu per hour, and burners used in Rule 1147 equipment are typically smaller than 2 million Btu per hour. The most common burner size in Rule 1147 equipment is about 1 million Btu per hour. Most of the burner sizes analyzed in the 2008 staff report are larger and rarely used in equipment subject to Rule 1147. The burner sizes evaluated in 2008 are more likely to be found in units at RECLAIM facilities.

In the 2008 Rule 1147 staff report, the average cost effectiveness for replacing the smallest burners with the lowest potential NOx emission reductions was estimated to be about \$22,400 per ton (adjusted to 2015 dollars). In the current analysis, the cost effectiveness of replacing burners and other components in small and low emission units varies widely. It is highly dependent upon how often a unit is used, which determines potential emission reductions. Staff estimates that a cost effectiveness range of \$15,000 to \$46,000 per ton is typical for retrofits of small and low emission equipment. However, retrofits of specific types of low emission equipment could result in cost effectiveness as high as \$88,000 per ton of NOx reduced.

Staff has used the current SCAQMD BACT Guidelines criteria of \$27,000 per ton for equipment that does not have a defined BACT as a guide to evaluate the cost effectiveness of low NOx retrofits for Rule 1147 equipment. Based on this analysis, staff is suggesting a delay of the requirements for equipment with NOx emissions of 1 pound per day or less until the equipment is modified, relocated or replaced with a new unit. This delay would include all spray booths and most small ovens and furnaces. Staff estimates that 4,900 to 5,650 out of 6,400 Rule 1147 units would be affected by this proposal.

## **Recommendations**

As a result of this technology assessment, the following changes are proposed for consideration:

- Exempt sources with total rated heat input less than 325,000 Btu per hour from the Rule 1147 NOx emission limit.
- Change the NOx emission limit from 30 ppm to 60 ppm NOx for the primary chamber for all burn-off ovens, burnout furnaces and incinerators.
- Delay compliance for existing in-use heated process tanks, evaporators and parts washers from the NOx emission limit until the combustion system or tank is modified, replaced or relocated.
- Delay compliance with the NOx emission limit for existing in-use spray booths until the heating system is modified or replaced or the unit is relocated.
- Delay compliance with the NOx emission limit for existing in-use units with actual NOx emissions of one pound per day or less until the combustion system is modified or replaced or the unit is relocated.

## **Comments Received**

Staff held a meeting of the Rule 1147 Task Force on February 17, 2016 to receive comments on a draft copy of the Technology Assessment that was released for public review. Staff also received comments in a letter from Furnace, Dynamics, Incorporated sent to SCAQMD staff on February 18, 2016. Stakeholders also provided comments at the Stationary Source Committee meeting on February 19, 2016. The attached Draft Technology Assessment does not yet include a discussion of these comments, but staff will incorporate these comments, other stakeholder's comments, contractor suggestions and staff responses into the next draft of the technology assessment, after the contractor meets with stakeholders.

The comments received at the Rule 1147 Task Force Meeting, in the comment letter and at the Stationary Source Committee focused on staff's initial recommendations and potential future rule amendments including: additional criteria for identifying low emission units, providing long term mitigation options, delaying compliance dates, and individual cost effectiveness calculations for every permit application. Another major category of comments dealt with rule implementation by SCAQMD Engineering and Compliance, including permit application review time, changing how potential emissions are estimated under new source review, and postponing Rule 1147 enforcement actions. There were a few comments received by letter and one comment at the committee meeting on the analysis of cost effectiveness in the technology assessment. These comments will be incorporated into the final document and discussed with stakeholders and the contractor prior to presenting the draft final technology assessment to the Stationary Source Committee.

Key stakeholder requests and staff responses are summarized in the table below:

## Stakeholder Requests and Staff Response

<ul style="list-style-type: none"><li>• Delay compliance or exempt small and low emission units</li><li>• Change emission limit for burn-off ovens</li><li>• Exempt existing in-use heated process tanks</li><li>• Delay compliance for existing in-use spray booths</li><li>• Provide more options for demonstrating low emissions other than default PTE</li><li>• Provide different exemption criteria for some equipment, including a 400,000 Btu/hr threshold and a pound per day measurement based on fuel usage</li></ul>	<ul style="list-style-type: none"><li>• Agree: Exempt small units and delay for low emission units</li><li>• Agree: Raise emission limit for primary chamber</li><li>• Agree: Delay compliance until modified, replaced or moved</li><li>• Agree: Delay compliance for low emission booths until modified, replaced or moved</li><li>• Rule currently allows options requested, but staff will clarify in rule and provide additional guidance</li><li>• Staff will work with stakeholders to evaluate alternatives</li></ul>
--	---

### Future Activity

Staff will continue working with members of the Rule 1147 Task Force and other stakeholders to collect additional information regarding the feasibility and cost of replacing combustion systems in equipment subject to Rule 1147. Staff will release a Request for Proposals to hire a third-party consultant to review the technology assessment and report back to the Rule 1147 Task Force. Staff has invited stakeholders to participate in the contractor selection process, and the contractor will present draft findings at a future Rule 1147 Task Force meeting, receive feedback and answer questions. The results of the contractor analysis and staff response will be reported back to the Stationary Source Committee with a draft final assessment and a list of actions to consider for future rule amendment.

### Attachment

Draft Technology Assessment for Rule 1147 Small and Low Emission Sources

## **ATTACHMENT**

# **SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

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## **Draft Technology Assessment for Rule 1147 Small and Low Emission Sources**

**February 2016**

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## **EXECUTIVE SUMMARY**

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## EXECUTIVE SUMMARY

### Background

SCAQMD Rule 1147 – NO<sub>x</sub> Reductions from Miscellaneous Sources was adopted in December 2008 and is an important component of the attainment strategy to meet the federal annual PM<sub>2.5</sub> ambient air quality standard as well as meet the ozone standard. The rule regulates NO<sub>x</sub> emissions from combustions sources that were not addressed by SCAQMD rules other than Rule 474 – Fuel Burning Equipment - Oxides of Nitrogen. Rule 474 was last amended in 1981 and limits NO<sub>x</sub> emissions rates from equipment burning gaseous fuels to 125 ppm and equipment burning liquid and solid fuels to 225 ppm (at 3% oxygen). Many categories of equipment used in a wide variety of processes are now regulated by Rule 1147. However, similar equipment can have a wide range of operating characteristics, process temperatures and emissions rates. Because of the number and variety of equipment affected, the rule compliance schedule was phased in over 10 years starting in 2010.

Rule 1147 was amended September 2011 to address compliance challenges, remove a requirement for fuel or time meters, delay compliance dates and provide regulatory relief to affected businesses. Throughout the rule amendment process, discussions with affected businesses, equipment manufacturers, and installers focused on concerns that there were many unique pieces of equipment and on the availability of cost effective and affordable low NO<sub>x</sub> technology. A major concern was the impact of the rule on small and low use equipment with NO<sub>x</sub> emissions of one pound per day or less. To address this challenge, the amended rule provided two solutions: first, sources with daily emissions rates less than or equal to one pound per day were given a delay of up to two years (until 2017 at the earliest) before they were required to comply with emission limits. These small and low emission units originally had compliance dates five years later than larger units. Second, Rule 1147 included a requirement that staff perform a technology assessment for these small and low emission sources that are not typically subject to the best available control technology (BACT) requirement as new sources.

### Technology Assessment

Initially the technology assessment targeted sources where burner technology was either not available or the retrofit cost is comparable to the cost of replacing the unit. Several categories of equipment were identified and removed from Rule 1147 and the requirement for a permit through the May 2013 amendments to SCAQMD Rules 219 and 222. Staff continued its technical evaluation and developed Rule 1153.1 – Emissions of Oxides of Nitrogen from Commercial Food Ovens to move existing in-use food ovens, roasters and smokehouses from regulation by Rule 1147 into their own rule. Rule 1153.1 was adopted in November 2014 and provided more appropriate temperature ranges for defining emission limits, food oven specific emission limits and later compliance dates. In addition, Rule 1153.1 provided a small source exemption for existing in-use units with emissions of up to one pound per day.

The last phase of the technology assessment focuses on the remaining categories of Rule 1147 equipment that were not addressed through the Rule 219, 222 and 1153.1 actions. This assessment utilizes information on affected equipment from the SCAQMD permit system, SCAQMD emissions testing programs and discussions with equipment and burner manufactures, affected businesses, consulting engineers and industry and business representatives. This report provides information on the types and number of equipment affected by Rule 1147, emission characteristics of these equipment and estimates of the cost and cost effectiveness of replacing old burners. Taken together, this information provides insight into compliance and affordability challenges faced by businesses affected by Rule 1147. While the focus of this report is on equipment with NO<sub>x</sub> emissions of 1 pound per day or less, the report also includes information and analysis applicable to larger units. This information is provided in order to address stakeholder's concerns regarding the availability of technology for larger equipment.

Staff conducted extensive outreach to equipment manufacturers and product installers. Staff went into the field to identify equipment that will comply with Rule 1147 emission limits with available burners and those that may not. Rule development staff has worked closely with industry representatives and other staff to develop solutions to unique compliance challenges. These discussions resulted in a number of proposals to staff that are included in this report.

Ten major categories of equipment were evaluated through the technology assessment including: afterburner technologies, spray booths, crematories, fryers, heated process tanks, metal melting furnaces, heat treating, multi-chamber burn-off ovens and incinerators, ovens and dryers. As a result of this assessment, the following five recommendations are proposed for consideration in future rule development:

- Exempt sources with total rated heat input less than 325,000 Btu per hour from the Rule 1147 NO<sub>x</sub> emission limit
- Change the NO<sub>x</sub> emission limit from 30 ppm to 60 ppm NO<sub>x</sub> for the primary chamber of all multi-chamber burn-off ovens, burn-out furnaces and incinerators for all process temperature
- Delay compliance for existing in-use heated process tanks, evaporators and parts washers from the NO<sub>x</sub> emission limit until such time the combustion system or tank is modified, replaced or relocated
- Delay compliance with the NO<sub>x</sub> emission limit for existing in-use spray booths until the heating system is modified or replaced or the unit is relocated
- Delay compliance with the NO<sub>x</sub> emission limit for existing in-use units with actual NO<sub>x</sub> emissions of one pound per day or less until the combustion system is modified or replaced or the unit is relocated

Staff estimates that 4,900 to 5,650 out of 6,400 units would be affected by these proposed changes. Staff will continue working with members of the Rule 1147 Task Force and other

stakeholders to collect additional information regarding the feasibility and cost of replacing combustion systems in equipment subject to Rule 1147. Staff will release a Request for Proposals (RFP) to hire a third-party consultant to review the technology assessment and report back to the Rule 1147 Working Group. Staff has invited stakeholders to participate in the contractor selection process. The results of the contractor analysis and staff response will be reported back to the Stationary Source Committee with a list of actions to consider for future rule amendment.

## **BACKGROUND**

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## **INTRODUCTION**

The California Health and Safety Code requires the AQMD to adopt an Air Quality Management Plan to meet state and federal ambient air quality standards and adopt rules and regulations that carry out the objectives of the AQMP. The California Health and Safety Code also requires the AQMD to implement all feasible measures to reduce air pollution.

SCAQMD Rule 1147 was adopted December 2008 and because of the number and variety of equipment affected, the rule compliance schedule was phased in over 10 years. The NO<sub>x</sub> reductions from Rule 1147 are a vital component of our attainment strategy and essential for achieving compliance with federal and state ambient air quality standards for PM<sub>2.5</sub>, PM<sub>10</sub> and ozone. Rule 1147 was also amended in September 2011 to address compliance challenges and provide regulatory relief for affected businesses.

## **REGULATORY HISTORY**

Rule 1147 – NO<sub>x</sub> Reductions from Miscellaneous Sources, was adopted by the AQMD Governing Board on December 5, 2008. Rule 1147 incorporates two control measures of the 2007 Air Quality Management Plan (AQMP): NO<sub>x</sub> Reductions from Non-RECLAIM Ovens, Dryers and Furnaces (CMB-01) and Facility Modernization (MCS-01).

Control measure MCS-01 proposed that equipment operators meet best available control technology (BACT) emission limits at the end of a combustion system's useful life. Control measure CMB-01 proposed emission NO<sub>x</sub> limits in the range of 20 ppm to 60 ppm (referenced to 3% oxygen) for ovens, dryers, kilns, furnaces and other miscellaneous combustion equipment. Emission reductions from the equipment addressed by Rule 1147 and control measure CMB-01 of the 2007 AQMP were proposed in prior AQMPs (e.g., control measure 97CMB-092 from the 1997 AQMP).

Rule 1147 was amended September 9, 2011 to delay implementation dates one to two years, remove a requirement for fuel or time meters and provide compliance flexibility for small and large sources. In addition, the rule includes a requirement for a technology assessment for small and low emission sources that are not typically subject to the best available control technology (BACT) requirement as new sources.

## **RULE REQUIREMENTS**

Rule 1147 established nitrogen oxide (NO<sub>x</sub>) emission limits for a wide variety of combustion equipment and affects both new and existing (in-use) combustion equipment. Rule 1147 requires equipment with AQMD permits that are not regulated by other NO<sub>x</sub> rules to meet an emission limit of 30 to 60 parts per million (ppm) of NO<sub>x</sub> depending upon equipment type and process temperature. The compliance schedule for existing equipment is phased in over 10 years starting in 2010. Compliance dates for emission limits are based on the date of equipment manufacture and emission limits are applicable to older equipment first. Owners of existing equipment are provided at least 15 years of use before they must meet rule emission limits. The first group of equipment affected had to comply

with rule emission limits when they were 20 to 30 years old. Owners of small units and units with emissions of one pound per day or less will comply with emission limits later starting in 2017.

Rule 1147 also establishes test methods and provides alternate compliance options including a process for certification of equipment NO<sub>x</sub> emissions through an AQMD approved testing program. Certification eliminates the requirement for end-users to test their equipment. Other rule requirements include equipment maintenance and recordkeeping.

In developing rule, staff worked extensively with many stakeholders. Staff held Task Force meetings with representatives from affected businesses, manufacturers, trade organizations and other interested parties. Staff also had separate meetings with manufacturers and distributors of equipment and burner systems. In addition, staff met individually with and visited local businesses to observe operations and equipment affected by Rule 1147. Staff committed to continued discussion with industry through the Rule 1147 Task Force and meetings with individual businesses on issues affecting small business including availability of low NO<sub>x</sub> burners for unique applications and specific processes.

The majority of the comments made at the Public Workshop and Task Force meetings for the 2011 amendment supported the proposed delay of compliance dates and limits on the use of meters. However, some consultants commented that the compliance delay was not needed and the AQMD should have made a greater effort to educate businesses affected by Rule 1147. An enhanced outreach program to the regulated community was a high priority for the AQMD.

The comments on the proposed amendments received at the workshop and meetings for the 2011 amendment typically fit into two categories. One set of comments dealt with implementation of the rule and asked for clarification or simplification of rule requirements. In response, staff proposed a number of changes relating to equipment identification, maintenance, recordkeeping, and source testing requirements, which ultimately will result in cost savings compared to the original rule. In addition, the amendment added a mitigation fee option that allows business with equipment emissions greater than one pound per day to delay compliance by three years but will provide emission reductions from other sources during that three year period. Together with AQMD efforts to streamline the permit modification process, the amendment helped businesses comply with rule requirements.

The second category of comments received addressed issues beyond the scope of the 2011 amendment which was crafted to respond to the compliance challenges existing at the time. These comments included proposals for new alternative industry-specific rules, questioning availability of low NO<sub>x</sub> replacement burners, requests for exemption from the rule for small sources, requests to reevaluate rule cost and cost effectiveness and a request to require a cost effectiveness analysis for every piece of equipment subject to the rule. To address many of these issues and as previously stated, the rule amendment committed the SCAQMD to conduct a technology assessment for smaller sources with emissions of one

pound per day or less no later than 18 months prior to the first effective compliance date for these smaller sources (July 1, 2017).

## **AFFECTED INDUSTRIES AND EQUIPMENT**

A wide variety of processes use equipment that is regulated by Rule 1147. These processes include, but are not limited to, food products preparation, printing, textile processing, product coating; and material processing. A large fraction of the equipment subject to Rule 1147 heats air that is then directed to a process chamber and transfers heat to process materials. Other processes heat materials directly such kilns, process tanks and metallurgical furnaces.

Rule 1147 affects manufacturers (NAICS 31-33), distributors and wholesalers (NAICS 42) of combustion equipment, as well as owners and operators of ovens, dryers, furnaces, and other equipment in the District (NAICS 21, 23, 31-33, 42, 44, 45, 48, 49, 51-56, 61, 62, 71, 72, 81, and 92). The units affected by the rule are used in industrial, commercial and institutional settings for a wide variety of processes. Some examples of the processes regulated by the rule include metal casting and forging, coating and curing operations, asphalt manufacturing, baking and printing.

Staff originally estimated approximately 6,600 units subject to the emission limits of Rule 1147 are located at approximately 3,000 facilities. Staff estimated that about 1,600 units at about 800 facilities affected meet the NO<sub>x</sub> emission limits of Rule 1147. This leaves about 2,200 facilities that are expected to require retrofit of burners in their equipment. Staff estimated as many as 2,500 permitted units with NO<sub>x</sub> emission limits greater than one pound per day and an additional 2,500 permitted units with NO<sub>x</sub> emission limits of less than one pound per day will require modification to comply with the emission limits.

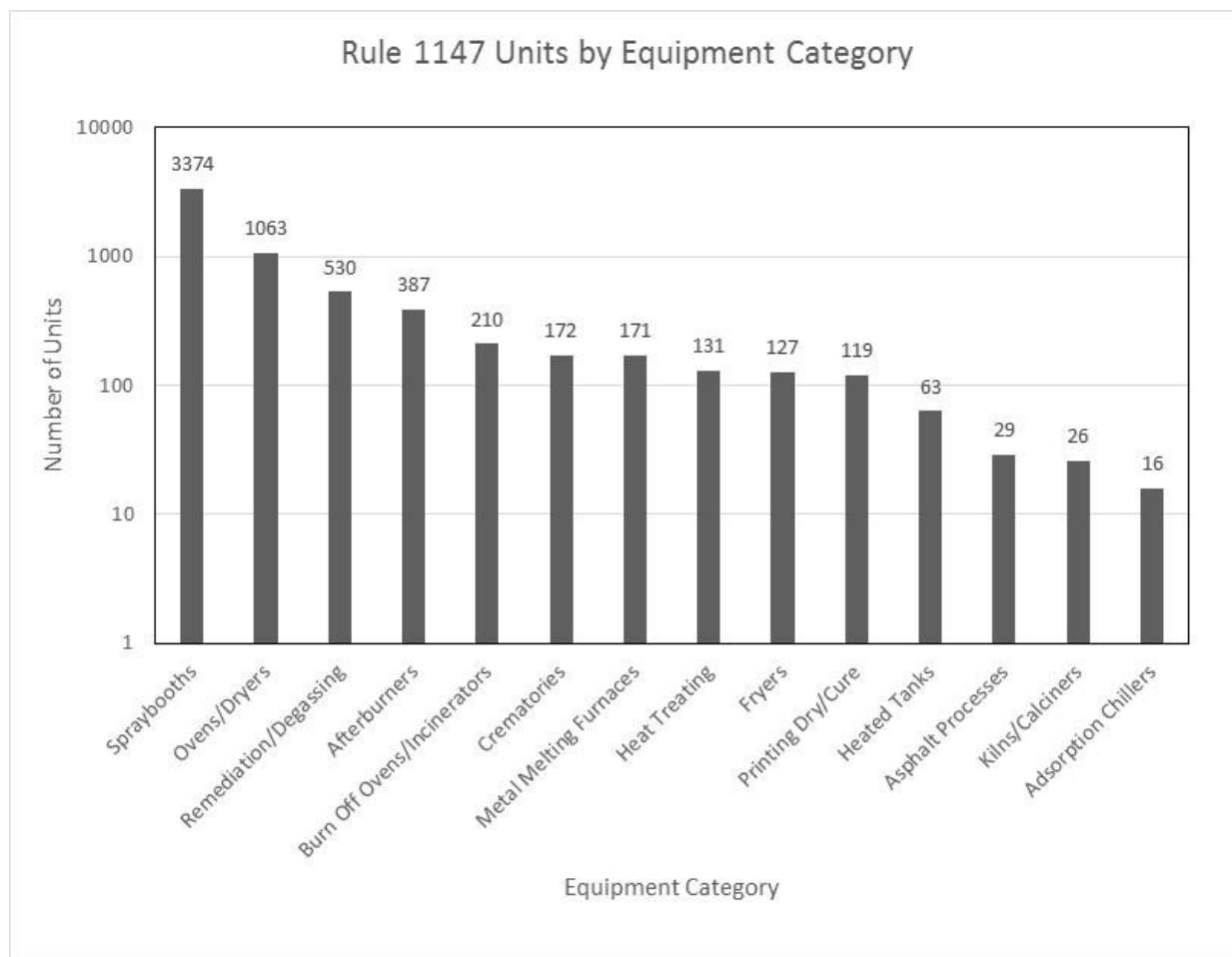
Based on an update of the active permitted equipment in the SCAQMD, an estimate of the number of equipment potentially subject to Rule 1147 and the fraction of units in different categories is presented in Figure 1-1. Staff estimates that as many as 6,400 pieces of equipment are potentially subject to Rule 1147 requirements. More than half of the units ( $\approx 3,400$ ) are spray booths and prep-stations. Excluding spray booths and prep-stations, staff estimates that at least one quarter of the units in each category will meet Rule 1147 emission limits without retrofitting burners.

The second largest category of equipment is ovens and dryers with approximately 1,100 units subject to the rule. Staff estimates that at least one-third of the permitted ovens will meet Rule 1147 emission limits based on a sample of the burners used in the ovens. There are also approximately 500 additional ovens and dryers with SCAQMD permits that are not subject to Rule 1147 because they are heated electrically, with infrared lamps, or using a boiler or thermal fluid heater. Electric, infrared lamp, and boiler and thermal fluid heated ovens and dryers are not included in the Figure 1-1.

The third largest group of equipment is air pollution control units that capture and incinerate VOCs, CO, PM and toxics. There are approximately 900 afterburners, degassing units and remediation units. The remaining categories of equipment have significantly

fewer units with high temperature processes (metal melting, heat treating, burn off ovens, kilns and crematories) being the next largest group with approximately 700 units in these five categories. Although these categories have fewer equipment, many units have significantly higher emissions than spray booths and small ovens. Appendix A provides a more detailed summary of the industries and equipment categories affected by Rule 1147.

Figure 1-1



Based on permitted emissions and information provided by manufacturers, vendors and businesses, staff has calculated an emissions inventory of 3.0 to 5.2 tons of NO<sub>x</sub> per day from the equipment regulated by Rule 1147. Spray booths ( $\approx 3,400$  units) contribute about 0.5 to 0.6 tons per day. Other types of equipment with permit limits of one pound per day or less ( $\approx 1,500$  units) have NO<sub>x</sub> emissions totaling about 0.4 tons per day. Equipment with a potential to emit of more than one pound per day ( $\approx 1,500$  units) contribute NO<sub>x</sub> emissions of 2.1 to 4.2 tons per day. These emission estimates are consistent with the 6.2 tons per day emission estimate developed from the 2007 AQMP for adoption of Rule 1147 in 2008.

Note that the AQMP inventory was based on fuel use and default emission factors. The 2007 AQMP inventory did not take into account lower emissions from units that met



BACT emission limits. Using the midpoint of the estimated range from the above calculation for larger sources gives a total inventory estimate for all equipment of about 4.1 tons of NO<sub>x</sub> per day. This estimate is consistent with the AQMP inventory and permit information that at least one quarter of the units have burners that can comply with BACT and Rule 1147 emission limits.

In addition, staff estimates that as many as half of the units (750 out of 1,500) with a potential to emit greater than one pound per day may have actual daily NO<sub>x</sub> emissions less than a pound per day. If this estimate is correct, then more than half of units with emissions greater than one pound per day of NO<sub>x</sub> (about 375) have already submitted test protocols and test results. Moreover, because of the Rule 1147 compliance schedule, most of the remaining half of the 750 units with actual emission greater than one pound per day have been permitted since the late 1990s and installed burners that comply with BACT and Rule 1147 NO<sub>x</sub> emission limits.

## **TECHNOLOGY ASSESSMENT**

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## **SOURCES OF INFORMATION**

This report includes information from the technology assessments for Rule 1147 adoption in 2008, the rule amendment in 2011 and new information from the Rule 1147 emission testing program. This information is summarized by equipment category and by rule emission limit. The basis for the technology based emission limits in the rule are in Part D of the SCAQMD BACT Guidelines. In addition, testing performed to demonstrate compliance with SCAQMD permit limits indicated when an emission limit was achieved in practice and was used in the technology assessments for rule adoption and amendment. While the focus of this report is on equipment with NO<sub>x</sub> emissions of 1 pound per day or less, the report also includes information and analysis applicable to larger units. This information is provided in order to address stakeholder's concerns regarding the availability of technology for larger equipment.

The appendices to this report provide detailed information on affected industries, emission testing, cost effectiveness calculations, available technology and emission test results for these equipment categories. Appendix A provides a detailed summary of the equipment categories and businesses affected by Rule 1147. Appendix B of this report includes a summary of the sources of information used for rule adoption and the subsequent 2011 amendment. Appendix C provides a discussion of the SCAQMD emission test program, testing guidelines and a summary of the Rule 1147 emissions test completed. Appendices E through N provide details on the equipment, burners and emission test results for the different categories of equipment subject to Rule 1147.

In addition to information available from SCAQMD programs, this report includes recommendations from equipment and burner manufactures, affected businesses, consulting engineers and industry and business representatives. Staff conducted outreach to equipment manufacturers and product installers. Staff went into the field to identify equipment that will comply with Rule 1147 emission limits with available burners and those that may not. Rule development staff has worked with industry representatives and other staff to develop solutions to compliance challenges. These discussions resulted in a number of proposals to staff that are included in this report.

## **RESULTS OF THE RULE 1147 EMISSION TESTING PROGRAM**

Emission testing is performed to demonstrate compliance with an emission limit. Testing companies do enough calibration, testing and calculation to prove that pollutant concentration or mass emissions are below the applicable limit. Most Rule 1147 emission test results are adjusted by the testing company or SCAQMD staff to address issues with a test's acceptable range or with other testing and calculation issues. While emission tests can demonstrate compliance with an emission limit, many test results cannot be used to accurately estimate concentrations or mass emissions from individual units and categories of equipment. However, the Rule 1147 testing program does demonstrate that burners and their control system comply with the rule emission limits.

Table 2-1 provides a summary of submitted Rule 1147 NOx emission test results that have completed SCAQMD staff review and demonstrated compliance with Rule 1147 emission limits. These test results indicate that equipment subject to Rule 1147 comply with the NOx emission limits. Table 2-1 shows the number of test results and average NOx emission concentrations for units tested at the highest and at a low firing rate if applicable. In most cases the highest firing rate tested is the normal operating condition. However, in a small number of cases the low firing rate is the normal condition. The table also indicates the applicable NOx emission limit for each category of equipment. Table 2-1 does not include results from tests that were subsequently repeated because the original test did not comply with the test method, test protocol or SCAQMD guidelines.

**Table 2-1**  
**Rule 1147 Emission Test Results**

Equipment Category	Rule 1147 NOx Limit (ppm <sup>1</sup> )	Number of Units Tested at Normal/High Fire	Average NOx Concentration at Normal/High Fire (ppm)	Number of Units Tested at Low Fire	Average NOx Concentration at Low Fire (ppm)
Afterburner/ Regenerative Thermal Oxidizer	30 or 60 <sup>2</sup>	13	26	4	13
Afterburner/ Thermal or Catalytic Oxidizer	30 or 60 <sup>2</sup>	9	40	1	41
Afterburner/ Remediation Unit	60	2	23	1	24
Spray Booth (Automobile)	30	10	24		
Spray Booth (Other)	30	13	18	2	22
Crematory	60	20	50		
Dryer/Asphalt	40	1	35		
Fryer	60	7	29		
Fuel Cell Heater	30 or 60 <sup>2</sup>	1	11	1	9
Heated Tank	60	7	37	1	34
Metallizing Spray	30 or 60 <sup>2</sup>	1	22		
Metal Heat Treat	60	23	48		
Metal Melting (Large)	60	8	42	1	58
Metal Melting Pot/Crucible	60	5	54		
Multi-chamber Burn Off Oven or Furnace	30/60 or 60/60 <sup>3</sup>	11	42 <sup>4</sup>		
Multi-chamber Incinerator	30/60 or 60/60 <sup>3</sup>	1	54 <sup>4</sup>		
Oven/Dryer	30 or 60 <sup>2</sup>	112	20	35	21
Print Dryer/Oven	30	19	20	4	23
Textile Shrink Dryer	30	2	24		
Textile Tenter Dryer	30	4	23	4	26
Unit Heater	30 or 60 <sup>2</sup>	3	20	1	13
<b>Number of Units</b>		<b>272</b>		<b>55</b>	

<sup>1</sup> The Rule 1147 NOx limit is based on a reference level of 3% oxygen (O<sub>2</sub>) in the exhaust. All emission test results are converted to a concentration in parts per million at the reference level of 3% O<sub>2</sub>.

<sup>2</sup> The emission limit depends upon the process temperature.

<sup>3</sup> The emission limit for the primary chamber varies depending upon process temperature.

<sup>4</sup> Average NOx emissions measured after the secondary chamber (afterburner).

## **BURNER AVAILABILITY AND FEASIBILITY TO RETROFIT UNITS**

While the Rule 1147 emissions testing program indicates that the rule limits are achievable for all categories of equipment with current available technology, there is one situation where low NO<sub>x</sub> burners are not available. There is also one type of process for which staff recommends changing an emission limit based on the type of burners used in that process. In addition, there are several related categories of equipment where it is not feasible to retrofit an existing unit.

### **Burners for Small Ovens and Dryers**

Low NO<sub>x</sub> burners are not available for very small low temperature ovens or dryers. The smallest burners produced are between 0.4 and 0.5 mmBtu per hour. If an oven requires a burner to consistently operate below about 0.3 mmBtu per hour, low NO<sub>x</sub> burners are not available to meet the 30 ppm NO<sub>x</sub> emission limit. There are smaller low NO<sub>x</sub> burners for high temperature applications that must meet an emission limit of 60 ppm. However, these applications typically require multiple burners and the total heat input exceeds 0.4 mmBtu per hour. Based on these findings, staff is considering exempting units with heat inputs less than 325,000 Btu per hour from the rule emission limit.

### **Emission Limit for Burn off Ovens and Furnaces**

The second category of equipment that may have difficulty meeting an emission limit of 30 ppm in low temperature applications is burn off ovens, furnaces and incinerators. Burn off ovens and furnaces melt and incinerate coatings and other materials on a product that is being recycled. This occurs in a chamber where the process temperature may be above or below 800 °F. For processes below 800 °F the NO<sub>x</sub> emission limit is 30 ppm. The incinerated materials go to a second chamber or incinerator that operates above 800 °F and has a NO<sub>x</sub> emission limit of 60 ppm.

However, the preferred type of burner for the primary incineration chamber is the same type of burner used in high temperature applications such as afterburners. These are also the same types of burners used in kilns, direct fired furnaces and crematories. These burners have been designed to comply with emission limits in the 50 to 60 ppm range. After discussions of this issue with equipment and burner manufacturers, staff is considering changing the emission limit for the primary chamber of burn off ovens, furnaces and incinerators to 60 ppm.

### **Heated Process Tanks, Evaporators and Parts Washers**

The Rule 1147 testing program has identified three types of heating systems used in process tanks, evaporators and some parts washers that comply with the NO<sub>x</sub> emission limit. There is no information yet available for the fourth type of heating system. For all four of these systems, the burners and heat exchangers or tubes are designed as one integrated system. If an individual heated tank or evaporator system using any of systems does not comply with the emission limit, then the whole tank will have to be replaced. Exempting existing in-use units from complying the rule emission limit unless the combustion system is modified would address the issue that it is not feasible to retrofit an existing heated tank with different burners. If a tank is retrofitted with new burners, the owner will likely

replace the heating tubes or heat exchanger. If the owner rebuilds a process tank, then a rule compliant system can be installed at that time.

## **COST AND COST EFFECTIVENESS**

## REVIEW OF SCAQMD COST EFFECTIVENESS ANALYSIS

There is no single cost or cost effectiveness limit established by the SCAQMD Board for use in rule development, permitting or other programs. Cost effectiveness for CARB and SCAQMD rules and programs differ and depend upon the program, the pollutant, the nature of the process and equipment affected and the types of feasible emission control options. For example, in 1993 a \$15,000 per ton criteria for RECLAIM Trading Credits was adopted by the Board for the SCAQMD emission trading program to trigger additional evaluation and potential rule amendment. Adjusted to 2015 dollars using the Marshall & Swift Equipment Cost Index, that criteria would now be approximately \$25,000 per ton. However, for amendment of the SO<sub>x</sub> RECLAIM program in 2010, the SCAQMD Board approved an amendment with cost effectiveness up to \$60,000 per ton (adjusted to 2015 dollars).

For Rule 1147 adoption, staff estimated average cost effectiveness for replacement of different sizes of burners. Most of the burners evaluated for adoption of Rule 1147 were too large and not used by equipment subject to the rule. Those burners are only used by large equipment subject to the RECLAIM program. Most of the equipment subject to Rule 1147 requirements have heat inputs less than 4 million Btu per hour and burners used in Rule 1147 equipment are less than 2 million Btu per hour. The most common burner size in Rule 1147 equipment is 1 million Btu per hour. In the 2008 staff report, the average cost effectiveness for replacing the smallest burners with the lowest potential NO<sub>x</sub> emission reductions was about \$22,400 per ton (adjusted to 2015 dollars).

For new source review under SCAQMD Regulation XIII, cost effectiveness can be included in the determination of what is best available control technology (BACT) for emission control for non-major sources. For BACT decisions affecting new sources at major facilities, cost or cost effectiveness is not included in the evaluation. However, BACT determinations for non-major (minor) sources are established by two approaches. One path evaluates technology and cost effectiveness as part of a public process to establish minor source BACT. The public process includes workshops and stakeholder input. The cost effectiveness for those decisions varies depending upon the pollutant, process and equipment involved. Note that there is one important difference in the calculation of cost effectiveness between traditional BACT analysis and rule development. For rule development, a best estimate of equipment's useful life is used in the calculation of cost effectiveness instead of a fixed 10 year assumption that is associated with financing of new equipment.

Historically, the second path used to establish minor source BACT was demonstration by a permitted unit at a non-major facility that an emission limit was "achieved in practice." If an emission limit was achieved in practice at a non-major facility, that emission limit became minor source BACT and was required by SCAQMD for applications for subsequent SCAQMD permits for similar new units regardless of the cost and cost effectiveness.

The SCAQMD has also established maximum cost effectiveness criteria in the SCAQMD BACT guidelines for sources for which there is no defined minor source BACT (Appendix

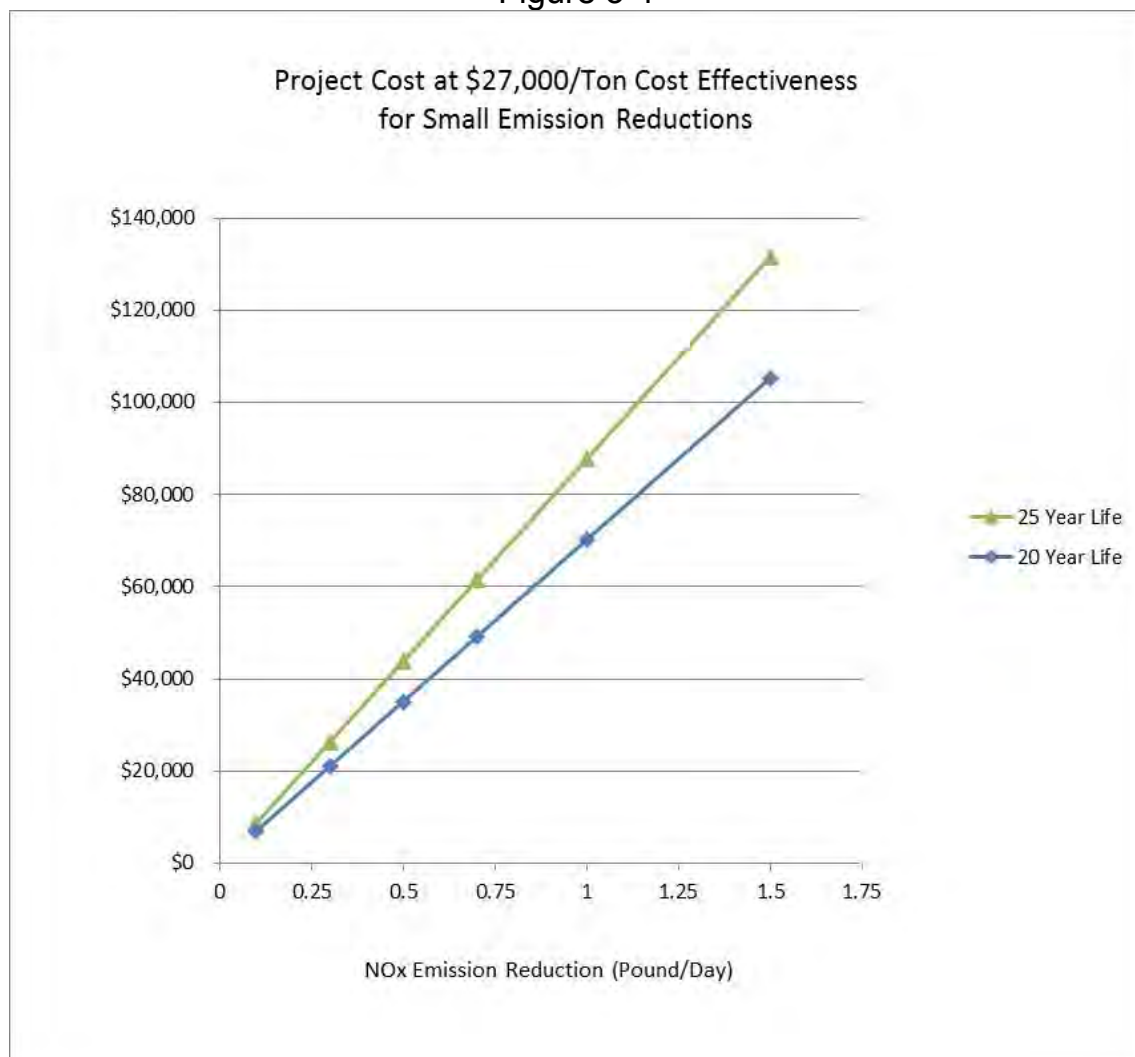


D). These cost effectiveness criteria is adjusted every calendar quarter by the Marshall & Swift Equipment Cost Index to account for changes in equipment cost. The cost effectiveness criteria for processes that do not have an established BACT is currently about \$27,000 per ton of NO<sub>x</sub> for average cost effectiveness and about \$81,000 per ton of NO<sub>x</sub> for the incremental cost effectiveness between two or more control options. The incremental cost effectiveness for Rule 1147 equipment is the difference in cost and emissions between an old natural gas burner (BACT prior to 1998) and a low NO<sub>x</sub> gas burner meeting rule emission limits. These minor source BACT criteria are appropriate for the analysis of cost effectiveness for small equipment with emissions of one pound per day or less.

### SCAQMD BACT COST EFFECTIVENESS CRITERIA

The cost to retrofit equipment and the NO<sub>x</sub> emission reductions for the project can be illustrated for different cost effectiveness criteria with a graph. Figure 3-1 shows an example using small emission reductions of approximately a pound per day and project cost that results in a cost effectiveness of \$27,000/ton of NO<sub>x</sub> reduced. The cost is shown for projects with equipment lifetimes of 20 and 25 years.

Figure 3-1



For emission reductions of 0.25, 0.5 and 1 pound per day, project costs of \$20,000, \$40,000 and \$80,000 have cost effectiveness of \$27,000 per ton. Emission reductions of 0.25 to 1 pound per day bound the range of emission reductions achievable from small and low emission equipment that are the subject of this technology assessment. This equipment has NOx emissions of one pound per day or less, are exempt from the BACT requirement under new source review and have more time to comply with Rule 1147 emission limits.

### **DISCOUNTED CASH FLOW ANALYSIS**

For calculating cost and cost effectiveness, SCAQMD BACT guidelines (Appendix D) and rule development use a discounted cash flow (DCF) analysis to estimate the cost and cost effectiveness of emission control options. The DCF method is used to calculate a net present value (NPV) of current and future expenses and savings (cash flows) from installing emission control equipment. When determining the cost and cost effectiveness of a control option, the current costs associated with the purchase and installation of equipment are added to the net current value of future costs and savings associated with operating the new equipment. In a situation where one emission control system is replacing another, the future cost and savings incorporated into the analysis are those above and beyond the cost of maintaining and operating the current equipment.

To calculate the cost effectiveness of an emission control system, the purchase, installation and operating cost of new equipment (the NPV) is divided by the emission reduction benefit of the new equipment over the operating life of the equipment. The operating life of equipment can vary from about 10 years for a residential tank type water heater to 25 or more years for residential heating furnaces, boilers, ovens, furnaces, kilns and afterburners. There is a significant number of permitted equipment including ovens, kilns, furnaces and afterburners systems operating in the SCAQMD that are 20 to 50 years old.

### **LEVELIZED CASH FLOW ANALYSIS**

In response to recommendations from a SCAQMD sponsored review of its socioeconomic analysis conducted by Abt Associates and stakeholder comments, all current and future rule analyses will include both the DCF and levelized cash flow (LCF) estimates of costs and cost effectiveness. The cost-effectiveness values based on DCF and LCF methods are not directly comparable to each other: DCF discounts all future operation and maintenance costs to their present values whereas LCF amortizes the initial capital and installation costs over the equipment lifetime. This is why DCF values are always lower than LCF values for the exact same amount of estimated compliance cost.

### **EXCLUDED COSTS**

Because the useful life of boilers, ovens and furnaces can be several decades, the cost of routine maintenance and equipment replacement unrelated to control equipment is not included in the cost effectiveness analysis of regulatory requirements to meet emission standards. For example, a boiler's heat exchange tubes may be replaced several times over the boiler's life. Burners and combustion control systems in boilers and other equipment must be maintained and are routinely repaired or replaced. In addition, heat treating furnaces have refractory and door seals replaced several times over the furnace's lifetime. Indirect fired heat treating furnaces also require replacement of heating tubes and may require replacement of heat shields and recirculation fans as the furnace ages. Furnace

refractory, seals, tubes and heat shields may be replaced two to three times over a twenty year period. These routine maintenance and repair expenses are independent of the cost of upgrading equipment to meet emission standards.

Costs for demonstrating compliance with SCAQMD rules and regulations are excluded from cost effectiveness analyses for emission control equipment. SCAQMD BACT Guidelines, permit processing policy, and rule development process do not include the cost of demonstrating rule compliance such as source testing in the calculation of emission control equipment cost effectiveness. However, compliance demonstration costs including emissions testing, recordkeeping and other costs beyond what is recommended by equipment manufacturers are included in the socioeconomic assessment for rule adoptions.

Compliance demonstration costs are not included in a cost effectiveness analysis of new pollution control systems because all units regulated by a rule are subject to the same compliance costs. All units required to meet the Rule 1147 NO<sub>x</sub> emission limit must be tested and the owner/operator must keep maintenance and test records. A rule compliant unit that does not replace its heating system has the same compliance costs as a unit that does replace burners and other components. Moreover, costs due to compliance with other SCAQMD rules such as Regulation XIII (new source review), including BACT and emission offsets, should not be included in the calculation of cost effectiveness for emission control equipment installed to comply with Rule 1147 emission limits.

### **CALCULATION OF COST EFFECTIVENESS PER BURNER**

The calculation of cost and cost effectiveness for Rule 1147 adoption and the 2011 amendment were done on a per burner basis. There are four reasons for this approach. First, combustion systems retrofit to comply with Rule 1147 emission limits use the same system components whether the unit has one or multiple burners. Burners, valves, and control systems will be the same for each burner. The system component that will differ is the combustion air blower (fan). Some units will use packaged burners with an integrated combustion air blower (fan) and others will use an external blower for one or multiple burners. Second, the cost per burner for a burner with its own integrated combustion air blower is higher than for a system with multiple burners and one blower. Third, most small or low emission units have only one burner and tend to use package burners with integrated combustion air blowers. Fourth, the emissions for the whole unit and per burner will be comparable whether one or multiple combustion air blowers are used. For these reasons, the cost effectiveness analysis in this document focuses on the cost and emission reduction per burner replaced utilizing the cost for a burner with an integrated blower.

### **COST AND COST EFFECTIVENESS OF REPLACING BURNER SYSTEMS**

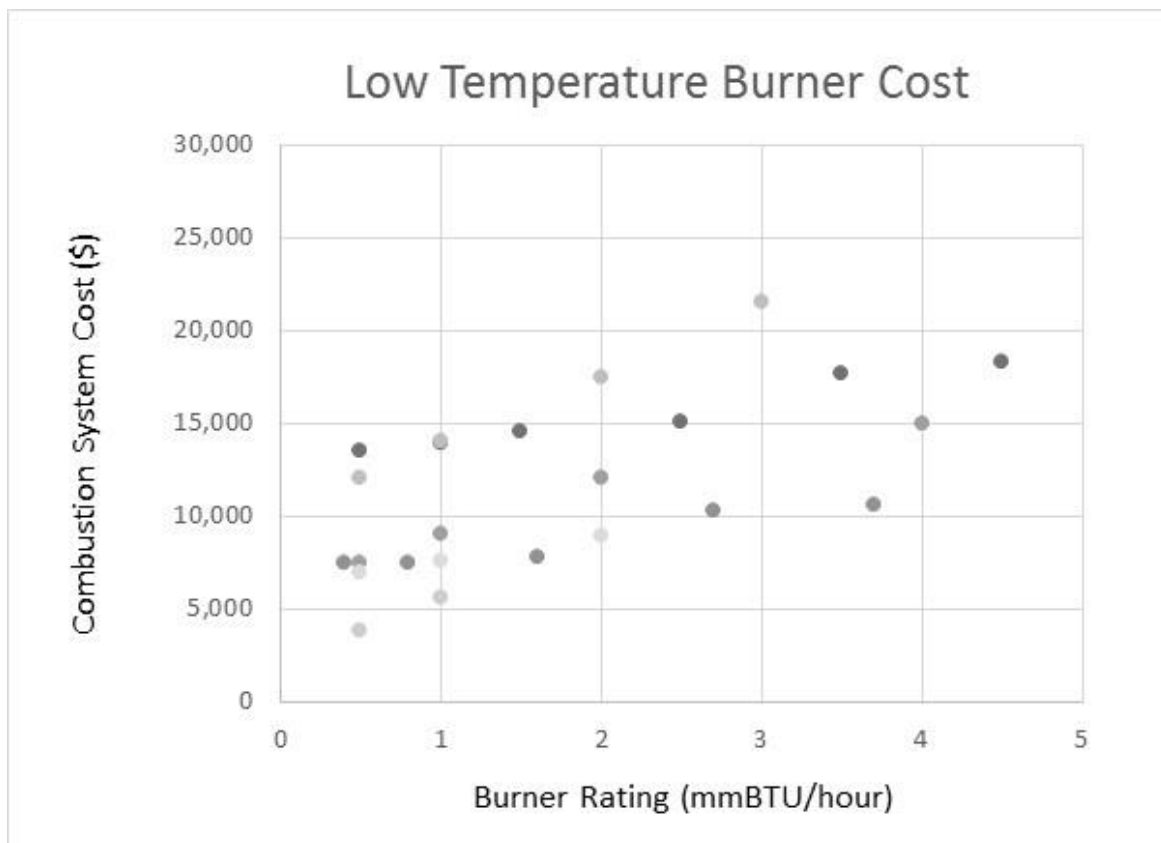
The cost of replacing burners and other combustion system components with the most commonly used low NO<sub>x</sub> burners is shown in Figures 3-2 and 3-3. Burner and combustion system replacement cost for low temperature applications that are required to comply with a 30 ppm NO<sub>x</sub> limit are displayed in Figure 3-2. Figure 3-3 shows replacement cost for high temperature applications that are required to meet a 60 ppm NO<sub>x</sub> limit. These figures include information for the most common burners from the three manufacturers that provide the majority of low NO<sub>x</sub> burners used in Rule 1147 equipment in the SCAQMD.

### Burner Cost and Cost Effectiveness for Low Temperature Ovens and Dryers

Figure 3-2 summarizes information on low NO<sub>x</sub> burners and system components for low temperature operations including ovens and dryers. These costs represent a typical equipment cost to the customer and do not include tax, shipping and installation costs. The information provided is for nozzle mix burners with packaged combustion air blowers including the Eclipse Winnox and HaloFire, the Maxon Cyclomax and Ovenpak-LE and the MidCo low NO<sub>x</sub> burner.

Other types of systems can also be installed in ovens and dryers, but the cost of those alternatives are comparable to the cost of burner systems with packaged combustion air blowers. The cost for a burner with a separate combustion air blower is comparable to the cost of a packaged burner. Separate combustion air blowers are used for larger burners or where multiple burners with one blower providing combustion air to all reduces the cost of the system. Low NO<sub>x</sub> line burners are also available from Eclipse and Maxon but are more commonly used for larger systems than those that are the focus of this report. However, the cost for small line burners are comparable to the cost of the low NO<sub>x</sub> packaged burner systems shown in Figure 3-2.

Figure 3-2



Eclipse and Maxon each have two nozzle mix low NO<sub>x</sub> burner product lines for low temperature applications. Each has one system that was developed about 15 years ago (Cyclomax and Winnox) and a recently developed burner system (HaloFire and Ovenpak-LE). Maxon also has a third low NO<sub>x</sub> burner (the M-Pakt) that uses a different technology

to lower NO<sub>x</sub> that is not included in this Figure but has been installed in a small number of units in the SCAQMD. The M-Pakt burner costs more than the burners included in Figure 3-2 but can achieve significantly lower NO<sub>x</sub> emissions (less than 10 ppm).

Because some replacements do not require the replacement of the fuel supply components and the control system while other retrofits require the replacement of all components, the Maxon Cyclomax and Eclipse Winnox cost in Figure 3-2 only include the cost of the burner with combustion air blower. The Eclipse HaloFire and the Maxon OvenPak-LE cost include the replacement of fuel and control systems. If a retrofit with a Winnox and Cyclomax burner requires replacement of other components including fuel and control systems, the total equipment replacement cost is comparable to the cost of purchasing a HaloFire or OvenPak-LE with all combustion system components. The MidCo low NO<sub>x</sub> burners are only sold with MidCo fuel and control system components and have two costs depending upon options requested. Replacement of a unit's fuel line and control system components depend upon the age of the original equipment and the replacement burner. If fuel line and control system components do not meet current building and safety codes, then they must be replaced with new components that comply with current code requirements.

The majority of the low emission equipment (1 pound/day NO<sub>x</sub>) subject to Rule 1147 have combustion systems rated less than 2 mmBtu/hour. Most use single burners rated less than 2 mmBtu/hour. The cost for installing a burner in the size range of 0.5 to 2 mmBtu/hour is a good estimate of the cost to replace combustion systems in typical low emission units. The cost of packaged burners and combustion systems of this size varies from about \$5,000 to \$15,000 with typical equipment costs ranging from \$7,500 to \$15,000.

However, to calculate total cost of replacing equipment, shipping, tax and installation costs must be added. One approach to estimate installed cost is an established EPA method that uses a multiplying factor to include sales tax and estimate shipping and installation cost. Based on the EPA method and the sales tax rate in southern California, the SCAQMD has used a factor of 1.87 times the cost of equipment to estimate installed cost. In this method, installation costs are assumed to be 50% of the equipment cost and are included in the factor. A contingency can also be included to address uncertainties in the cost estimation. For this analysis an additional 13% is added which results in an installed cost estimating factor of 2.0. Using this factor, an estimated cost for installing a low NO<sub>x</sub> burner in small ovens and dryers is approximately \$30,000 [ $\$15,000 \times 2.0$ ] but can be lower or higher depending upon the components replaced and other factors.

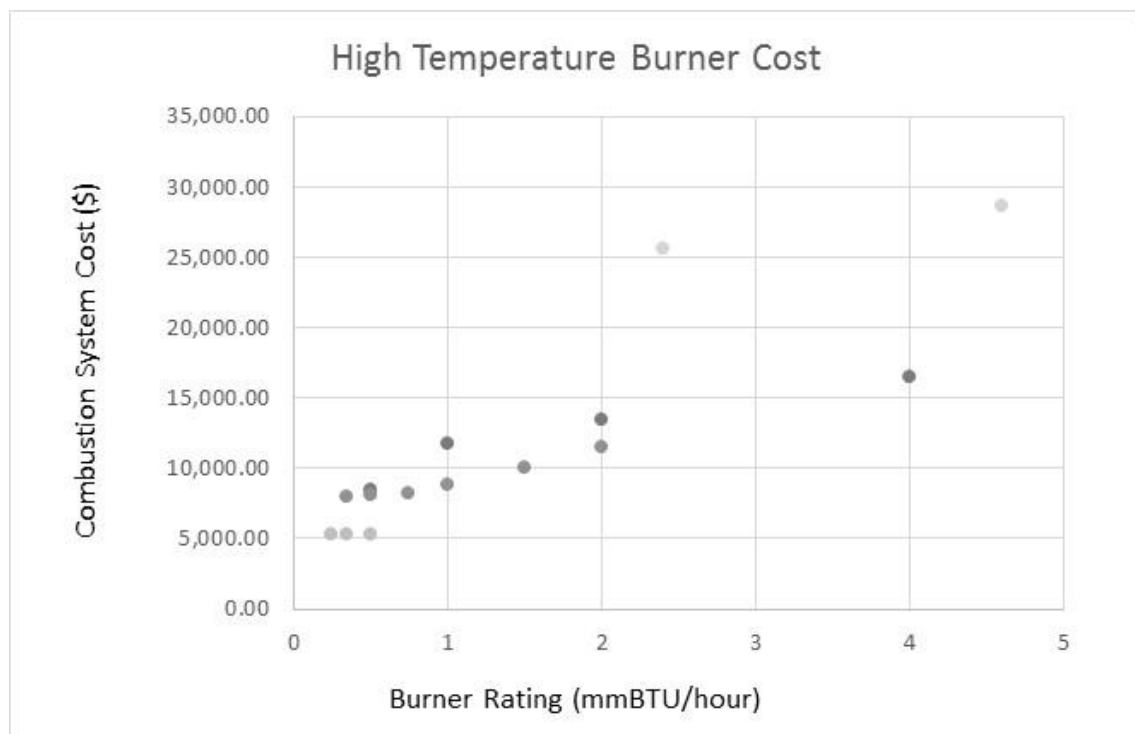
The cost effectiveness of replacing oven and dryer burners in this size range can be estimated using the NO<sub>x</sub> reductions possible from low emission units. Emission reductions of 0.25, 0.5 and 0.75 pounds per day over 260 days per year and 20 years result in a cost effectiveness of \$46,154, \$23,077, and \$15,385 per ton for a project cost of \$30,000. Since most reductions are likely in the range of 0.25 to 0.5 pounds per day, the range is best represented as \$23,000 to \$46,000 per ton of NO<sub>x</sub> reduced with the midpoint of this range at \$34,500 per ton. This cost effectiveness to replace combustion systems for low emission ovens and dryers is greater than the SCAQMD BACT \$27,000 per ton average criteria but less than the \$81,000 per ton incremental criteria for minor source BACT.

In summary, the cost of replacement burners and combustion system components can vary depending upon which components must be replaced. Depending upon the age of the original installation, the burner or the entire combustion system may be replaced. In addition, installation cost can vary depending upon the particular piece of equipment and whether the equipment owner has requested additional work that is not required for compliance with Rule 1147 emission limits. Additional cost will be incurred when upgrading capacity and performing other equipment maintenance. Disregarding other costs the equipment owner may choose to include in a retrofit project, the cost effectiveness for low emission units to comply with the Rule 1147 emission limit may exceed the SCAQMD minor source BACT average criteria for NO<sub>x</sub>.

### Burner Cost and Cost Effectiveness for High Temperature Applications

Figure 3-3 displays burner and combustion system costs for high temperature applications. These costs represent a typical equipment cost to the customer and do not include tax, shipping and installation costs. The three most common burners used in high temperature applications to comply with the Rule 1147 NO<sub>x</sub> emission limit of 60 ppm are the Maxon Kinedizer, the Eclipse Thermjet and Eclipse Tube Firing Burner (TFB). The Kinedizer and Thermjet are used in direct fired heating applications including metal melting, heat treating and in afterburners. The TFB is used for indirect heating applications such as heat treating. Burners from other major manufacturers including Bloom, Facultatieve, and North American/Fives have also been available for more than 15 years and were tested for Rule 1147 compliance. However, these systems were original installed burners and were not retrofits. Staff is not aware of any units that were retrofit with burners from these manufacturers in order to comply with Rule 1147.

Figure 3-3



Pot and crucible furnaces use small nozzle mix burners from a number of manufacturers. Figure 3-3 includes cost for different sizes of the Eclipse Ratio Air burner which has been installed in a small crucible furnace to comply with the Rule 1147 NO<sub>x</sub> emission limit. A Kinedizer burner has also been used to retrofit a small crucible furnace to increase capacity, reduce fuel cost and lower NO<sub>x</sub> emissions.

The cost per burner for high temperature applications is similar to the cost for low temperature applications. However, in larger metal melting and heat treating furnaces, multiple small burners are typically used to provide a more even distribution of heat in the furnace. In situations with multiple burners, the furnace is designed with one combustion air blower for all burners. However, the Eclipse Thermjet, the Ratio Air and the Maxon Kinedizer are also used in many applications requiring one burner. Consequently, the cost shown for the Thermjet, Ratio Air and Kinedizer in Figure 3-3 includes the cost of an individual combustion air blower, new fuel supply components and a new control system. In situations where multiple burners are installed with one combustion air blower and a common control panel, the cost per burner will be less. The cost for each TFB burner is based upon the cost for a system with six burners, new combustion air blower, fuel supply components and control system. The cost of the TFB burner also includes a flue gas recirculation (FGR) system for each burner that lowers NO<sub>x</sub> emissions. The FGR system is currently available for burners rated up to 0.5 mmBtu per hour.

For small high temperature applications up to 2 mmBtu per hour, the cost per burner is similar to the cost for low temperature applications and is in the range of \$5,000 to \$15,000. Using the EPA based multiplier factor of 2.0 to estimate installation cost for individual NO<sub>x</sub> burners in small high temperature equipment is approximately \$10,000 to \$30,000 but can be lower or higher depending upon the components replaced, number of burners and other factors.

Similar to the case of replacing burners in low temperature applications, the cost effectiveness of retrofitting smaller high temperature units with low NO<sub>x</sub> burners for emission reductions of 0.5 pounds per day or less may exceed the SCAQMD minor source BACT NO<sub>x</sub> average cost effectiveness criteria. For example, replacing burners at a cost of \$10,000 to \$30,000 per burner for an emission reduction of 0.5 pound per day per burner over 25 years gives a cost effectiveness range of \$6,150 to \$18,500. However, emissions are highly dependent on the size of unit and operating schedule. A reduction of 0.25 pounds per day per burner for the same cost gives a cost effectiveness range of \$12,300 to \$37,000 per ton. With this smaller emission reduction, the cost effectiveness may exceed the minor source BACT average cost effectiveness criteria of \$27,000 per ton depending upon the cost of the burners and other components selected. For emission reductions less than 0.2 pound per day the cost effectiveness is likely to exceed the BACT average cost effectiveness criteria.

As with low temperature applications, the cost of replacing burners and combustion system components varies depending upon components replaced. Contingent upon the age of the original equipment, the burner or the entire combustion system may require replacement. Installation cost varies between equipment and locations. In addition, the equipment owner

may request additional work that is not required for compliance with Rule 1147 emission limits which will increase the cost of the project.

### **Heating System Cost and Cost Effectiveness for Spray Booths**

The cost difference to a customer between a new certified rule compliant heated spray booth and a new non-compliant unit is less than \$10,000 based on information from manufacturers, vendors and the cost of booths prior to rule adoption. The cost for new units includes markups from the booth manufacturer applied to the cost of the burner, gas train and control system. Most of the specialty booths used for applications other than auto body repair were tested with standard burners, so there was no additional equipment cost to comply with Rule 1147 limits. However, the cost for adding a new natural gas fired certified heating system to an existing spray booth varies from \$30,000 to \$50,000 with a typical cost of about \$40,000. The heating system cost varies depending upon the manufacturer, type of booth and the individual installation.

The cost of a complete new booth is highly variable depending upon the type of booth and options. According to vendor supplied information, the cost to purchase and install a new spray booth is about 20% higher than in 2008 when Rule 1147 was adopted. This increase is consistent with industry data on the cost to purchase and install new equipment (i.e., Marshall & Swift Equipment Cost Index which includes inflation, the cost of materials and manufacturing costs). The typical new installation is a semi down draft (side draft) booth for about \$80,000. A new basic cross draft booth without recirculation is less and the cost of a new full down draft booth is about \$115,000 and up depending upon options. Although the cost for semi down draft and down draft booths are higher than for a basic cross draft, the heating system costs are about the same for basic and premium booths from the same manufacturer or vendor.

The cost effectiveness of a new low NO<sub>x</sub> SCAQMD certified auto repair booth is at most \$22,000 per ton  $[(\$10,000 \text{ at most}) / (70\% \text{ reduction in NO}_x) \times (0.25 \text{ lb/day} / 2000 \text{ lb/ton}) \times 260 \text{ days/year} \times 20 \text{ years}]$ . For higher volume shops, the cost effectiveness is lower than \$22,000/ton.

The cost to retrofit a used booth to install in the SCAQMD as a new permitted unit is significantly less than purchasing a new booth. However, the cost effectiveness for retrofitting an existing permitted auto repair booth with an SCAQMD certified heating system is \$88,000 per ton of NO<sub>x</sub> reduced based on a cost of \$40,000 and a 20 year life. For a high volume booth used two shifts a day, the cost effectiveness could be less than half this value (\$44,000/ton). For a booth retrofit costing \$30,000 the cost effectiveness is \$33,000 to \$66,000 per ton depending upon the number of cars processed. This cost effectiveness of retrofitting an existing permitted booth is higher than the minor source average cost-effectiveness criteria of \$27,000 per ton and may exceed the incremental cost effectiveness of \$81,000 per ton used for equipment without a defined BACT.

Depending upon the age of a used booth, the owner may have to upgrade the booth to meet current building and safety codes. The local building and safety agency may require mechanical, electrical, fire safety and other components be upgraded or replaced. These



costs are not attributable to Rule 1147 and are also not included in the cost effectiveness analysis for new, modified or relocated units that require a new SCAQMD permit.

The preceding analysis indicates the cost effectiveness for upgrading existing spray booths to comply with the Rule 1147 emission limit exceeds the minor source average cost-effectiveness criteria of \$27,000 per ton used by SCAQMD for equipment categories without a defined BACT and in some cases may exceed the incremental criteria of \$81,000 per ton. However, the cost effectiveness for new units is at most \$22,000 per ton and is less than the BACT Guidelines criteria. Because the cost effectiveness to retrofit an existing permitted booth is significantly higher than the minor source BACT criteria, staff is considering amending Rule 1147 to delay compliance for existing in-use permitted booths and heating units until they are modified, relocated or replaced. Staff is proposing that new, modified, or relocated units requiring an SCAQMD permit continue to be required to comply with the Rule 1147 NO<sub>x</sub> limit at the time of modification or installation. Currently a change of ownership in a business with an existing in-use permitted booth is exempt from the retrofit requirement unless the booth or heating unit is modified, relocated, replaced or becomes 20 years old.

## **EXAMPLES OF CALCULATIONS FOR SMALL SOURCES**

A number of equipment replacement scenarios have been submitted to SCAQMD staff as examples of high cost effectiveness for replacing burners in some small Rule 1147 equipment. This section reevaluates some of those scenarios presented to staff. In order to accurately reflect equipment operation and regulatory requirements, the following analyses use permit application information provided by the applicant, SCAQMD permit conditions and SCAQMD BACT guidelines.

### **Afterburner Controlling Smoke and Odors from Smokehouse**

An after burner for a smokehouse has been in operation since the 1960s. The afterburner is rated at 250,000 Btu/hour, is 50 years old and uses pipe burners. NO<sub>x</sub> emissions are more than 101 ppm (0.136 pound/million Btu). According to the equipment permit and application, the smokehouse operates 12 hours per day for three days a week and 4 hours per day two days per week. This operating schedule was confirmed by the company owner when recently questioned by an SCAQMD inspector. A permit condition requires the afterburner to operate whenever the smokehouse is in use (40 to 44 hours per week). If the current afterburner operates an average of 40 hours per week every week, NO<sub>x</sub> emissions over 25 years are 0.88 tons (0.25 mmBtu/hour X [0.136 lb/mmBtu] X [40 hour] X [52 weeks/year] X [25 years] / [2000 lb/ton]). While this operating schedule includes some holidays, it ignores second shifts and weeks when the company operates on a Saturday.

Because of the age and design of this particular afterburner, the entire unit likely needs to be replaced in order to comply with the Rule 1147 NO<sub>x</sub> emission limit. The burners in the unit are pipe burners which are pipes with holes in them. A consultant working with the company estimated that a replacement rule compliant afterburner would cost about \$30,000 (equipment and installation). Staff also contacted vendors to estimate the cost of a replacement afterburner for this application. Based on vendor information, a total project cost of \$30,000 is typical for a new afterburner of this size. A new rule compliant afterburner with emissions of less than 60 ppm (0.72 lb/mmBtu) would reduce emissions

by at least 0.42 tons over 25 years. The estimated cost effectiveness for this emission reduction is \$30,000 divided by 0.42 tons or about \$71,000/ton. For this afterburner and other types of equipment with very small burners, the cost of retrofitting or replacing the unit may be higher than the minor source BACT average cost effectiveness criteria for sources without a defined BACT.

The analysis of this case presented to staff showed a much higher cost effectiveness than \$71,000/ton because it assumed the afterburner operates only one hour per day. However, this afterburner must be operated at all times the oven is operating and contains smoke. This requirement is common to all emission control equipment permitted in the SCAQMD. In fact, the operator of this particular unit was cited in the past by the SCAQMD for not operating the afterburner consistent with this permit requirement.

### **Small Heated Process Tank or Evaporator**

Many small heated process tanks and evaporators have burners, heat exchangers, and tank dimensions that are specific to each manufacturer and product line. Replacement with different burners may require replacement of the entire tank if the heat exchange system cannot be replaced. The cost for replacing the smallest process tank and heat exchange system is at minimum \$30,000 to \$40,000. Burners purchased separately for a new tank rated less than one mmBtu/hour may cost as much as \$5,000 to \$10,000. The minimum cost for a new tank with burners is about \$40,000.

Most small heated tanks and evaporators operate with burners that cycle between high fire and off. A typical small system has burners in the size range of 350,000 Btu per hour (0.35 mmBtu/hour) to one million Btu per hour. NO<sub>x</sub> emissions based on a burner rating of 0.7 mmBtu/hour, a 20 year life and a default emission factor of 0.136 lb/mmBtu for natural gas are about 0.43 pounds per day or 1.1 tons over 20 years  $[(0.7 \text{ mmBtu/hour}) \times (50\%) \times (0.136 \text{ lb/mmBtu}) \times (9 \text{ hours/day}) \times (5 \text{ days/week}) \times (52 \text{ weeks/year}) \times (20 \text{ years}) / (2000 \text{ lb/ton})]$ . This operating schedule does not take into account holidays but it also does not include any weeks with second shifts or operation on Saturdays. A rule compliant system (60 ppm NO<sub>x</sub> or 0.72 lb/mmBtu) would reduce NO<sub>x</sub> emission by about 0.52 tons over a 20 year period. The cost effectiveness for replacing the whole system would be about \$79,000 per ton (\$40,000/ 0.52 tons). The cost to retrofit or replace this type of small low emission unit may be higher than the minor source BACT average cost effectiveness criteria for sources without a defined BACT.

### **Burners for Generating Smoke and Heating Smokehouse Oven**

A smokehouse has been in operations since the 1960s. The burner in the smokehouse is rated 35,000 Btu/hour with NO<sub>x</sub> emissions of more than 101 ppm (0.136 pound/million Btu of natural gas). Since 1990, BACT for smokehouse smoke generators is an electric heating element instead of a gas fired burner. An electric heating element costs less than \$100 including tax and shipping. Electric heating elements come in a variety of shapes and sizes. If the smokehouse burner is similar to round burners used in water heaters or ranges prior to 1983, the owner could also replace the old burner with a low NO<sub>x</sub> burner (15 ppm) used in modern water heaters for about \$100. The cost to install a circuit for the electric heating element or retrofit the gas burner would be about \$500 for a total cost of about \$600.

The burner/heating element in the smokehouse is used to heat wood chips to slowly generate smoke. It is also used to heat the smokehouse and is assumed to operate an average of two hours per day for 5 days each week. The amount of time the burner fires is determined the amount of wood chips and by the required oven temperature. The oven temperature depends upon the type of sausage produced and whether the smoked products contain sodium nitrite. Products without nitrites must be smoked at a higher temperature to kill bacteria.

For this example, the NO<sub>x</sub> emissions over 20 years are 50 pounds (0.0250 tons). The cost effectiveness for replacing the burner with a heating element or low NO<sub>x</sub> burner is at most \$24,000/ton of NO<sub>x</sub> reduced (\$600/0.0250 ton). If the burner or heating element operates for more than two hours per day, the cost effectiveness is lower. This example highlights that some small equipment can be retrofit to comply with Rule 1147 emission limits for low cost and reasonable cost effectiveness. Note that on adoption of Rule 1153.1 at the November 2014 Board meeting, existing smokehouses were removed from Rule 1147, included in Rule 1153.1 and are not required to comply with the rule's emission limits.

## **RECOMENDATIONS**

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## RULE CHANGES UNDER CONSIDERATION

The emission testing program for Rule 1147 indicates that most equipment regulated by the rule can comply with the NO<sub>x</sub> emission limit (i.e., Table 2-1). The appendices of this report discuss the emissions test results for each category of equipment which demonstrate compliance with rule emission limits. However, low NO<sub>x</sub> combustion systems are not available for some types of small units. In addition, some categories of equipment are difficult to retrofit. Based on technical feasibility, staff is considering the following changes to Rule 1147:

- Exempt new and existing in-use units with total rated heat input of less than 325,000 Btu/hour from the Rule 1147 NO<sub>x</sub> emission limit. There are no burners in this size range for ovens and dryers that are designed to meet BACT and Rule 1147 emission limits. The smallest low NO<sub>x</sub> air heating burners designed to comply with the 30 ppm NO<sub>x</sub> limit are 400,000 to 500,000 Btu/hour (0.4 to 0.5 mmBtu/hour). If this size burner is set up to operate at less than 325,000 Btu/hour and used in an oven that requires the burner to frequently operate at heat inputs of less than 30% of its capacity, then the burner is not likely to comply with the 30 ppm emission limit. While there are burners in this size range for high temperature equipment including heat treating furnaces and kilns, these units typically use multiple small burners (four or more), have total heat ratings much greater than 325,000 Btu/hour and must comply with a 60 ppm emission limit. This change would affect an unknown number of small units regulated by Rule 1147.
- Delay compliance with the NO<sub>x</sub> emission limit for in-use heated process tanks, evaporators and parts washers with an integrated heated tank until such time the combustion system or tank is modified. New units would be required to meet the emission limit unless the total unit heat rating is less than or equal to 325,000 Btu/hour. Source test information on three of the four available types of heating systems for these heated process tanks can comply with the emission limits. However, if a unit does not comply with the emission limit, the entire process tank must be replaced. Staff estimates this change would affect less than 50 units subject to the Rule 1147 NO<sub>x</sub> emission limit.
- Change the NO<sub>x</sub> emission limit from 30 ppm to 60 ppm NO<sub>x</sub> for the primary chamber of multi-chamber incinerators, burn-off ovens, burn-out furnaces and incinerators that operate below 800 °F. This new limit will be the same compliance limit required for higher temperatures. The burner needed for the primary chamber of these devices is not designed to achieve 30 ppm. This change would affect a small unknown number of units.

Based on cost effectiveness considerations, staff is considering the following changes to Rule 1147:

- Delay compliance with the NO<sub>x</sub> emission limit for most existing in-use spray booths until the booth or heating system is modified, relocated or replaced. Modified, relocated and new spray booths and prep stations would be required to meet the emission limit at the time of modification or installation unless the total unit heat rating is less than or equal to 325,000 Btu/hour. However, staff is considering to evaluate existing in-use operations with multiple booths and locations separately from smaller operations with one location and single booths and prep stations. The cost effectiveness for a new unit that meets the Rule 1147 NO<sub>x</sub> emission limit is at most \$22,000 per ton. The cost effectiveness for retrofitting an existing unit can be as high as \$88,000 per ton. This change will affect more than half of the units now subject to Rule 1147 emission limits. This will result in delays in emission reductions of 0.3 to 0.4 tons/day starting July 1, 2017. These emission reductions forgone will be reduced as new units replace old units.
- Delay compliance with the NO<sub>x</sub> emission limit for other existing in-use units with actual NO<sub>x</sub> emissions of one pound per day or less until the unit or combustion system is modified, relocated or replaced. In addition, if the unit's emissions exceed one pound per day of NO<sub>x</sub> at a later date, then the unit must comply with the NO<sub>x</sub> emission limit. Staff is considering to further evaluate operations with multiple small units whose emissions are significant. Unit emissions can be documented using gas or time meters and daily recordkeeping. The cost effectiveness for retrofitting low emission units varies considerably and can be significantly higher than the SCAQMD BACT Guidelines average cost effectiveness criteria for equipment for which BACT has not been defined. This change will affect at least one quarter of the in-use units subject to the Rule 1147 emission limit. This will result in delays of emission reductions of about 0.3 to 0.5 tons/day starting in July 1, 2017. These forgone reductions will decrease as new units replace old units.

These five changes to the rule would address infeasibility of retrofitting specific types of units and reduce cost by delaying compliance with the NO<sub>x</sub> concentration limit for units with low emissions. These changes would affect at least 4,900 permitted units of which two thirds are spray booths. In addition, up to half of the remaining 1,500 units subject to Rule 1147 may also have NO<sub>x</sub> emissions less than one pound per day which would result in compliance delays for 5,650 out of 6,400 units. These changes will result in a delay in emission reductions of 0.6 to 0.9 tons per day. However, these forgone emission reductions will be made up over 15 to 25 years as old units are replaced with new compliant units.

## REFERENCES

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## REFERENCES

EPA, 2002. *EPA Air Pollution Control Cost Manual, Sixth Edition* [EPA-452-02-001], United States Environmental Protection Agency, February 2002

SCAQMD, 2011. *Rule 1147 – NO<sub>x</sub> Reductions from Miscellaneous Sources*, South Coast Air Quality Management District, September 2011.

SCAQMD, 2008. *Rule 1147 – NO<sub>x</sub> Reductions from Miscellaneous Sources*, South Coast Air Quality Management District, December 2008.

SCAQMD, 2000. *Best Available Control Technology Guidelines Part D: BACT Guidelines for Non-Major Polluting Facilities*, South Coast Air Quality Management District (October 2000, Revised October 3, 2008)



## **APPENDICES**

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## Appendix A – Summary of Rule 1147 Equipment Categories

## SUMMARY OF RULE 1147 EQUIPMENT CATEGORIES

Units regulated by Rule 1147 are used in commercial, industrial, government and institutional settings and by a variety of businesses. Rule 1147 affects manufacturers (NAICS 31-33), distributors and wholesalers (NAICS 42) of combustion equipment, as well as owners and operators of ovens, dryers, furnaces, and other equipment in the SCAQMD (NAICS 21, 23, 44, 45, 48, 49, 51-56, 61, 62, 71, 72, 81, and 92).

A wide variety of processes use equipment that is regulated by Rule 1147. These processes include, but are not limited to, coating; printing, textile processing, material processing, and manufacturing using wood, plastics, ceramic and metal materials. A large fraction of the equipment subject to Rule 1147 heat air that is then directed to an oven or dryer in order to dry or cure materials or coatings (convective heating). In addition, most paint booths and semi-enclosed prep-stations that are used to control overspray of coatings during application also have a heat source to accelerate curing and drying of coatings. Other types of equipment heat products directly using a combination of radiant and convective heating (e.g., radiant ovens, kilns, process tanks and furnaces). Some ovens, dryers, furnaces and kilns do not use burners to provide heat and consequently are not regulated by Rule 1147. They use electric heaters, electric infrared lamps, or heat provided by a boiler or thermal fluid heater. Boilers and thermal fluid heaters are regulated by SCAQMD Rules 1146, 1146.1 and 1146.2.

In 2008 SCAQMD staff originally estimated about 6,600 pieces of equipment located at approximately 3,000 facilities would be subject to the emission limits of Rule 1147. Staff also estimated that at least 1,600 units at about 800 facilities already met the NO<sub>x</sub> emission limits of Rule 1147. The remaining 2,200 facilities were expected to require retrofit of at least one unit. Staff estimated up to 2,500 permitted units with NO<sub>x</sub> emission limits greater than one pound per day and an additional 2,500 permitted units with NO<sub>x</sub> emission limits of less than one pound per day might require modifications in order to comply with the emission limits.

Based on an update of the active permitted equipment in the SCAQMD, an estimate of the number of equipment potentially subject to Rule 1147 and the fraction of units in different categories is presented in Figures A-1, A-2 and A-3 below. Staff estimates that as many as 6,400 pieces of equipment are potentially subject to Rule 1147 requirements. More than half of the units ( $\approx 3,400$ ) are spray booths and prep-stations. Excluding spray booths and prep-stations, staff estimates that at least one quarter of the units in each category will meet Rule 1147 emission limits without retrofitting burners.

The second largest category is ovens and dryers with approximately 1,100 units subject to the rule. Staff estimates that at least one-third of the permitted ovens will meet Rule 1147 emission limits based on a sample of the burners used in the ovens. There are also approximately 500 additional ovens and dryers with SCAQMD permits that are not subject to Rule 1147 because they are heated electrically, with infrared lamps, or using a boiler or

thermal fluid heater. Electric, infrared lamp, and boiler and thermal fluid heated ovens and dryers are not included in the Figures A-1, A-2 and A-3.

The third largest group of equipment is air pollution control units that capture and incinerate VOCs, CO, PM and toxics. There are approximately 900 afterburners, degassing units and remediation units. The remaining categories of equipment have significantly fewer units with metallurgical processes (metal melting and heat treating) being the next largest group with approximately 300 units between the two categories. Although these categories have fewer equipment, many include equipment with significantly higher emissions.

Figure A-1

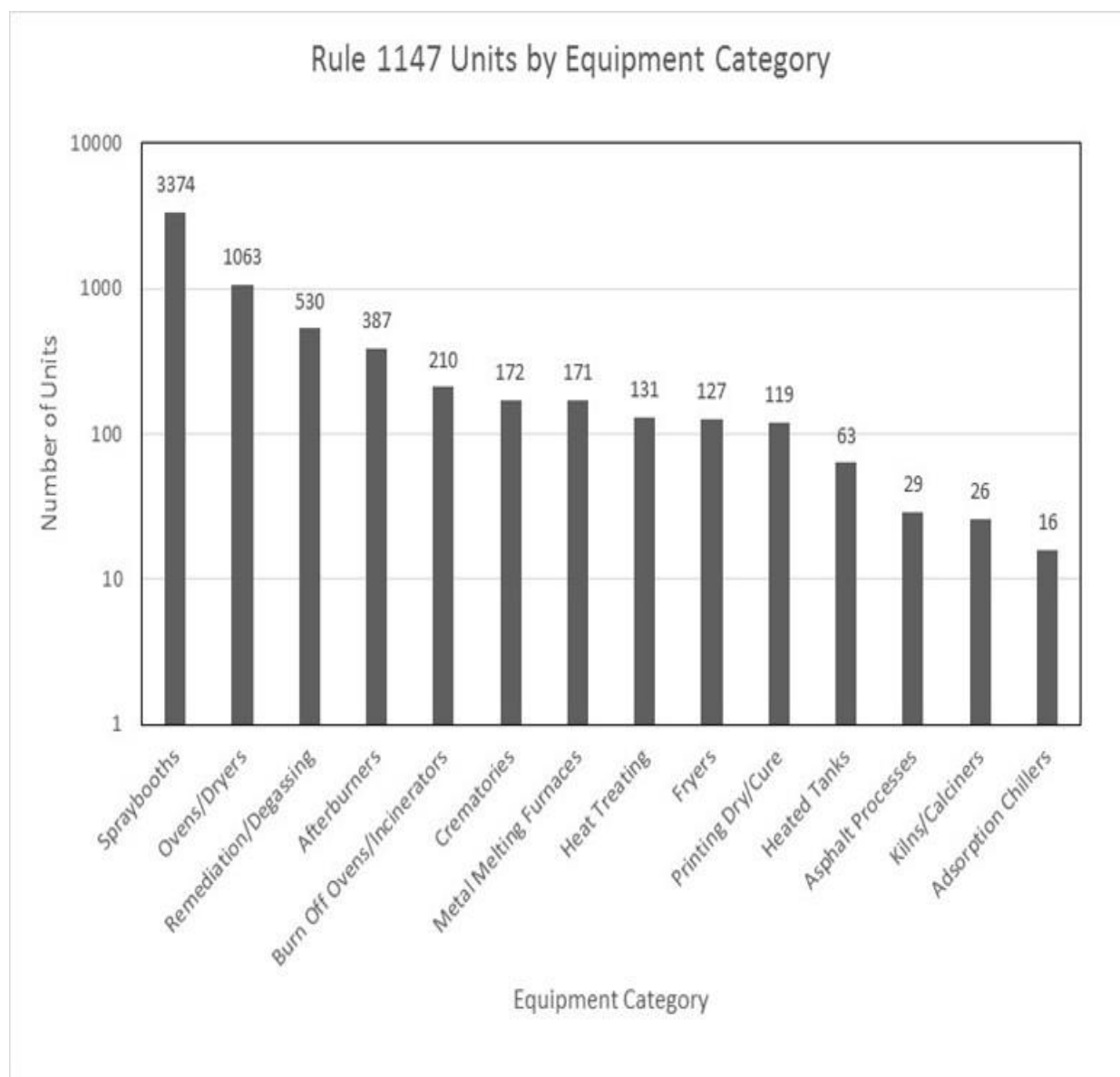


Figure A-2

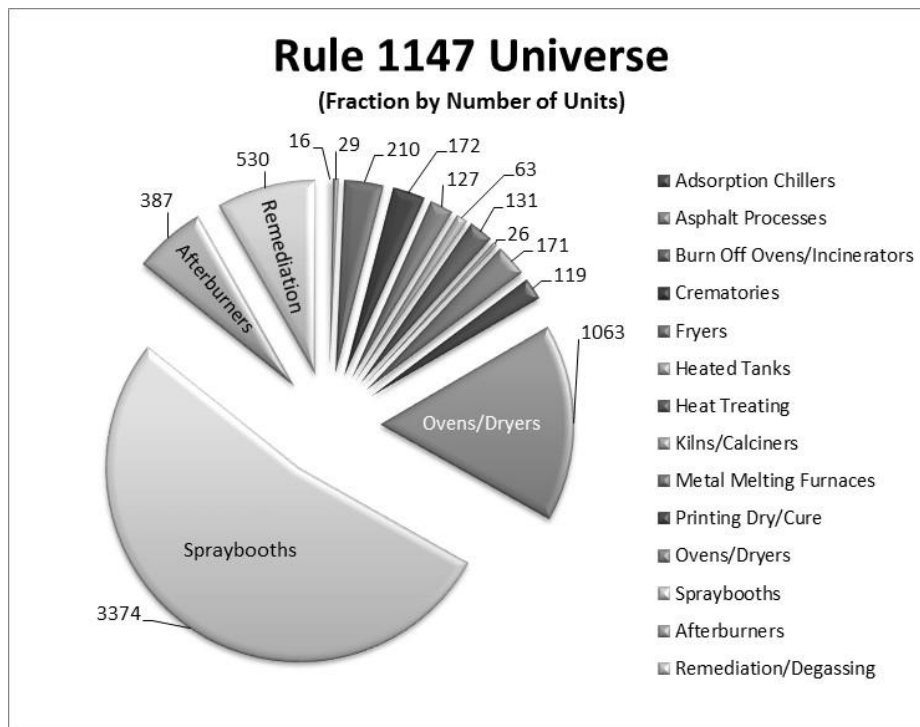
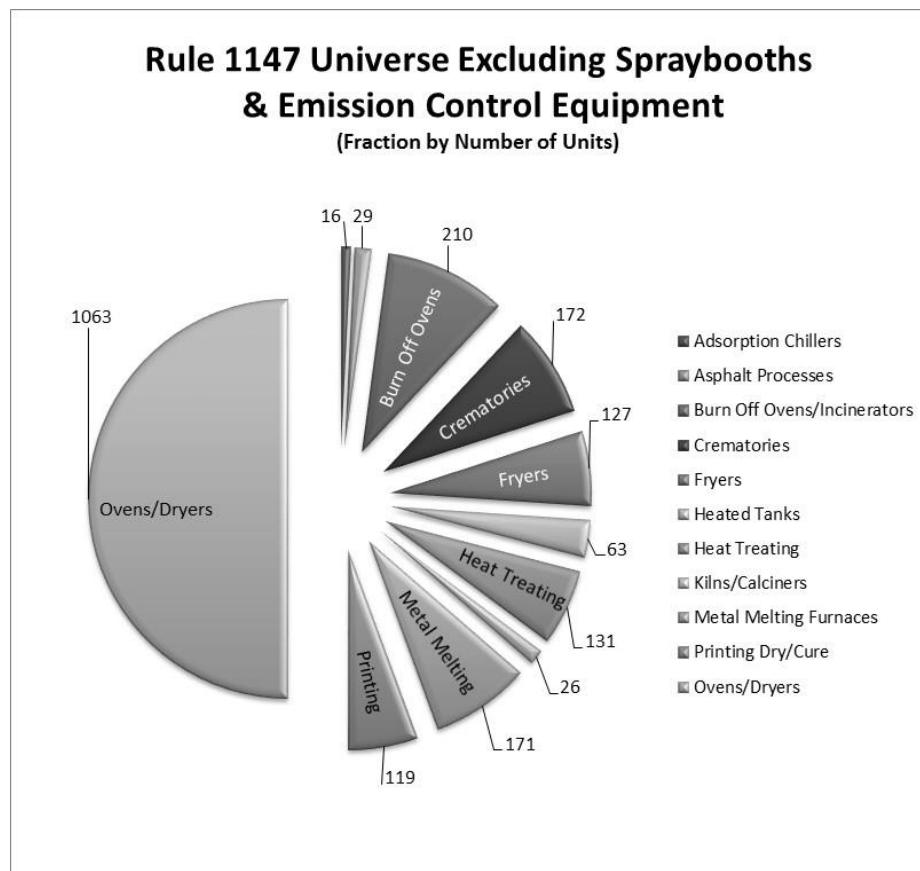


Figure A-3



The focus of this technology assessment is on smaller low emission equipment with emissions of one pound per day or less. An emission level of one pound per day is used to determine a unit's Rule 1147 compliance schedule. Units with emissions of one pound per day or less are provided up to 20 years from date of manufacture before they are required to demonstrate compliance with the NOx emission limit. Units with emissions greater than one pound per day must demonstrate compliance by the time a unit is 15 years old. New or relocated units must demonstrate compliance when they are installed. A potential to emit (PTE) of greater than one pound per day for new or relocated units also triggers the requirement to install best available control technology (BACT) under new source review (NSR) pursuant to SCAQMD Regulation XIII.

Staff has estimated the number of Rule 1147 units with NOx emissions greater than one pound per day based on a unit's PTE in the SCAQMD permit database. For spray booths and prep stations (semi-enclosed spray booths), approximately 5% (about 170) have NOx emissions greater than one pound per day. These higher emitting booths are either larger than the booths used for refinishing automobiles and light trucks or they are used in a production line at a manufacturing facility. For the remaining categories of equipment, approximately 50% have a PTE greater than one pound per day. This means approximately 1,700 units subject to Rule 1147 potentially have NOx emissions greater than one pound per day. The remaining 4,700 units have a PTE of one pound per day or less.

In previous analyses presented in rule staff reports and to the Rule 1147 Task Force, staff estimated that with the exception of spray booths at least 25% of the units in each category will comply with Rule 1147 limits without retrofitting burners. However, recent results from emissions testing of Rule 1147 units suggest that the compliance rate for units with their original burners and NOx emissions greater than one pound per day could be 50% or greater for some categories of equipment. In addition, some units with a PTE less than one pound per day have low emissions because the owner originally installed BACT compliant burners and reduced their PTE below one pound per day. New or modified sources are not required to purchase emission offsets if the average emission increase is a pound per day or less.

As an alternative to estimating emissions based on the inventory developed for the SCAQMD AQMP, total NOx emissions from equipment subject to Rule 1147 can be estimated using these units' PTE and other information. Business owners and equipment vendors indicate typical automotive booths and many other booth operations have annual average emissions of less than one third pound per day. However, up to 200 booths used in manufacturing and other applications may have emissions of a pound per day or more. Based on this information, the 3,400 permitted booths and spray stations have emissions of 0.5 to 0.6 tons NOx per day. The 1,500 other types of combustion equipment with PTE of less than or equal to a pound per day have average emissions of 0.5 pound per day per unit for a total of about 0.4 tons NOx per day. Based on this approach, the 4,700 Rule 1147 units with a PTE equal to or less than one pound per day emit about one ton of NOx per day.

The average PTE for the remaining 1,500 units is 5.6 pounds NOx per day using each unit's 30 day average PTE. The 30 day average PTE is calculated for a month using the weekly operating schedule but the monthly emissions are divided by 30 days instead of the number of days the equipment operates each month. Assuming these 1500 units emit at least half of their 30 day average PTE, the range for the emission estimate from the 1,500 greater than one pound per day units is from 2.1 to 4.2 tons of NOx per day. Using the range for the emission estimates calculated above provides an estimated total Rule inventory of 3.0 to 5.2 tons of NOx per day from the equipment regulated by Rule 1147. This emissions estimate is consistent with the 6.2 tons per day emission estimate developed from the 2007 AQMP for adoption of Rule 1147 in 2008.

It should be noted that the AQMP inventory was based on fuel use and default emission factors. The 2007 AQMP inventory did not take into account lower emissions from units with burners that can achieve BACT emission limits. Using the midpoint of the estimated range for larger sources gives a total inventory estimate of 4.1 tons of NOx per day for Rule 1147 equipment. This emission estimate is consistent with the AQMP inventory and permit information that at least one quarter of the units have burners that can comply with BACT and Rule 1147 emission limits.

In addition, staff estimates that as many as half of the units (750 out of 1,500) with a potential to emit greater than one pound per day may have actual daily NOx emissions less than a pound per day. If this estimate is correct, then half of the units with actual NOx emissions greater than one pound per day of NOx have already been tested (about 375) and comply with Rule 1147 emission limits. Moreover, because of the Rule 1147 compliance schedule, most of the remaining half of the 750 units are likely to have been permitted since 2000 and would have installed burners that will comply with BACT and Rule 1147 emission limits.

## Appendix B – SCAQMD BACT and Test Results for Emission Limits Achieved in Practice and Used for Rule Development



## SCAQMD BACT AND TEST RESULTS FOR EMISSION LIMITS ACHIEVED IN PRACTICE AND USED FOR RULE DEVELOPMENT

Rule 1147 was adopted on December 5, 2008 and amended September 9, 2011. Rule 1147 is based on two control measures from the 2007 Air Quality Management Plan (AQMP): NO<sub>x</sub> reductions from Non-RECLAIM Ovens, Dryers and Furnaces (CMB-01) and Facility Modernization (MSC-01). NO<sub>x</sub> emission from ovens, furnaces, kilns and afterburners had been proposed as control measure CMB-02 in the 1994 and 1997 AQMPs. Facility Modernization was a new AQMP measure that proposed equipment be upgraded to the best available control technology (BACT) available at the time the 2007 AQMP was adopted. The Facility Modernization measure is also proposed to be continued in the upcoming revision to the AQMP.

This appendix provides a summary of the NO<sub>x</sub> BACT determinations and SCAQMD permit limits achieved in practice by different types of units prior to rule adoption in 2008 and the 2011 rule amendment. The following figures were presented in rule development Task Force meetings and Rule 1147 Staff Reports for the 2008 adoption and the 2011 amendment. Figures B-1 to B-4 identify BACT determinations that were published by the SCAQMD and other air agencies prior to rule adoption. Figures B-5 and B-6 identify NO<sub>x</sub> emission limits that were achieved in practice through test results for equipment permitted prior to rule adoption. Figures B-7 and B-8 identify additional emission test results indicating NO<sub>x</sub> emission limits that were achieved in practice by permitted equipment tested in the SCAQMD prior to the 2011 rule amendment.

Figure B-1

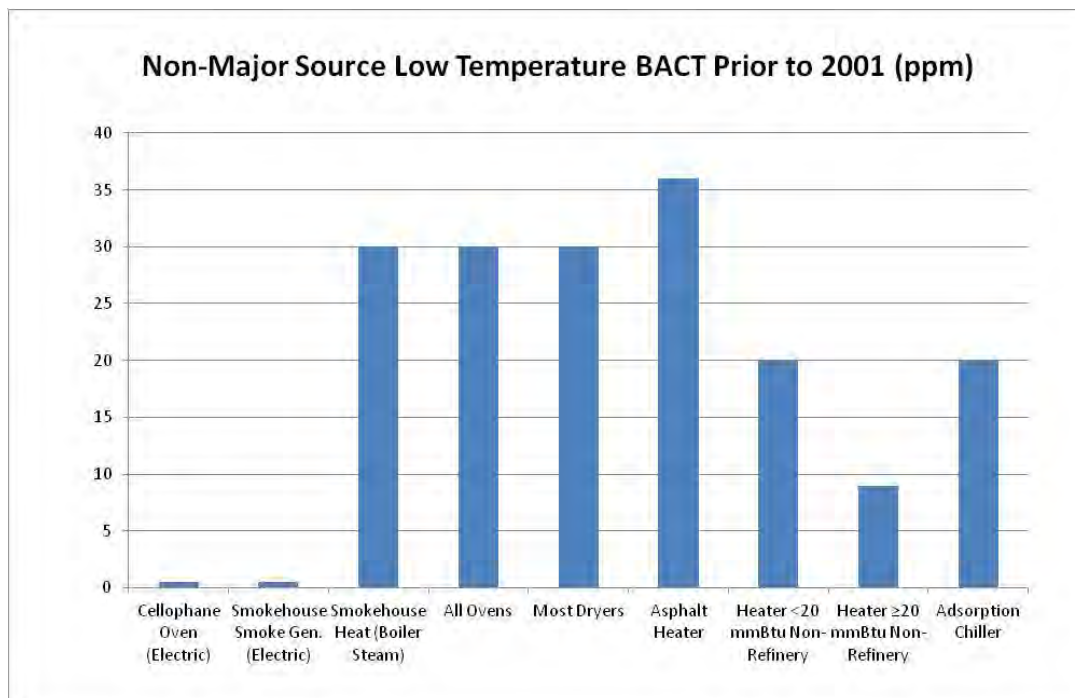


Figure B-2

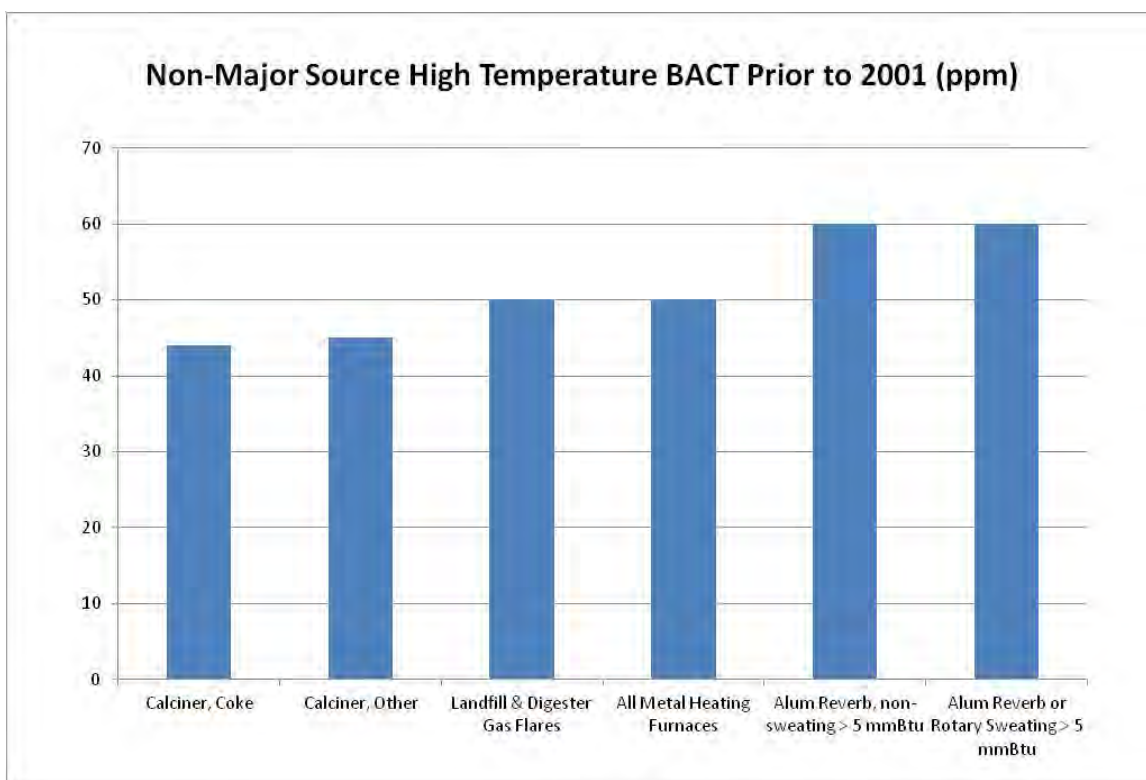


Figure B-3

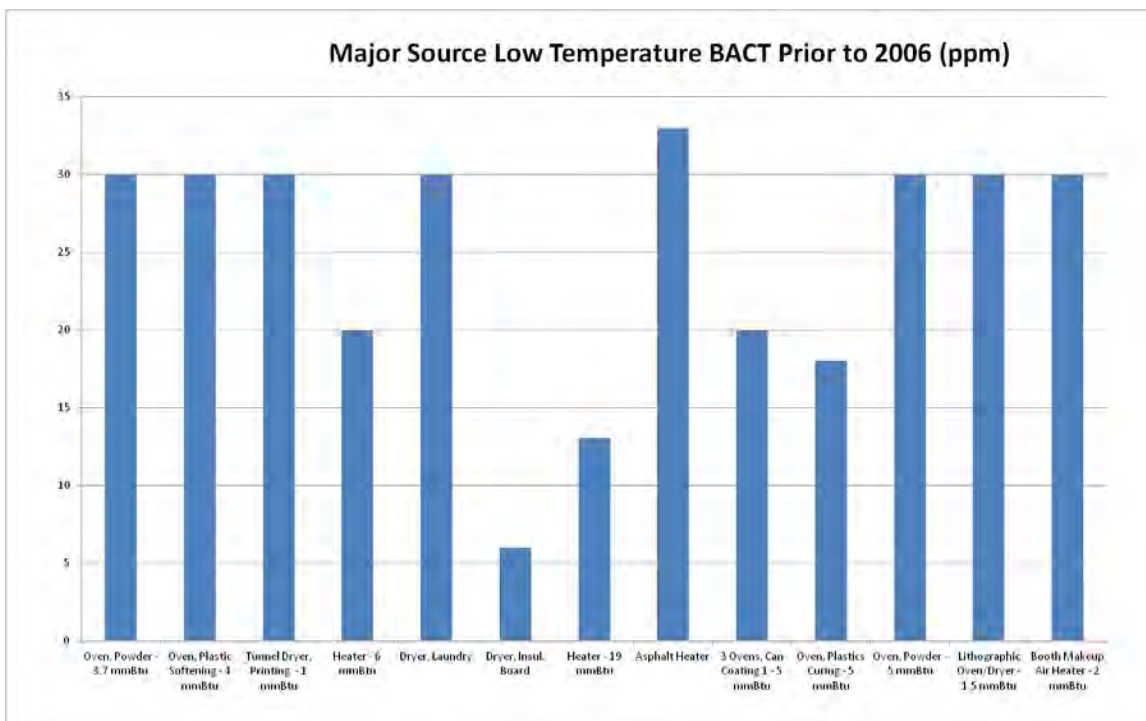


Figure B-4

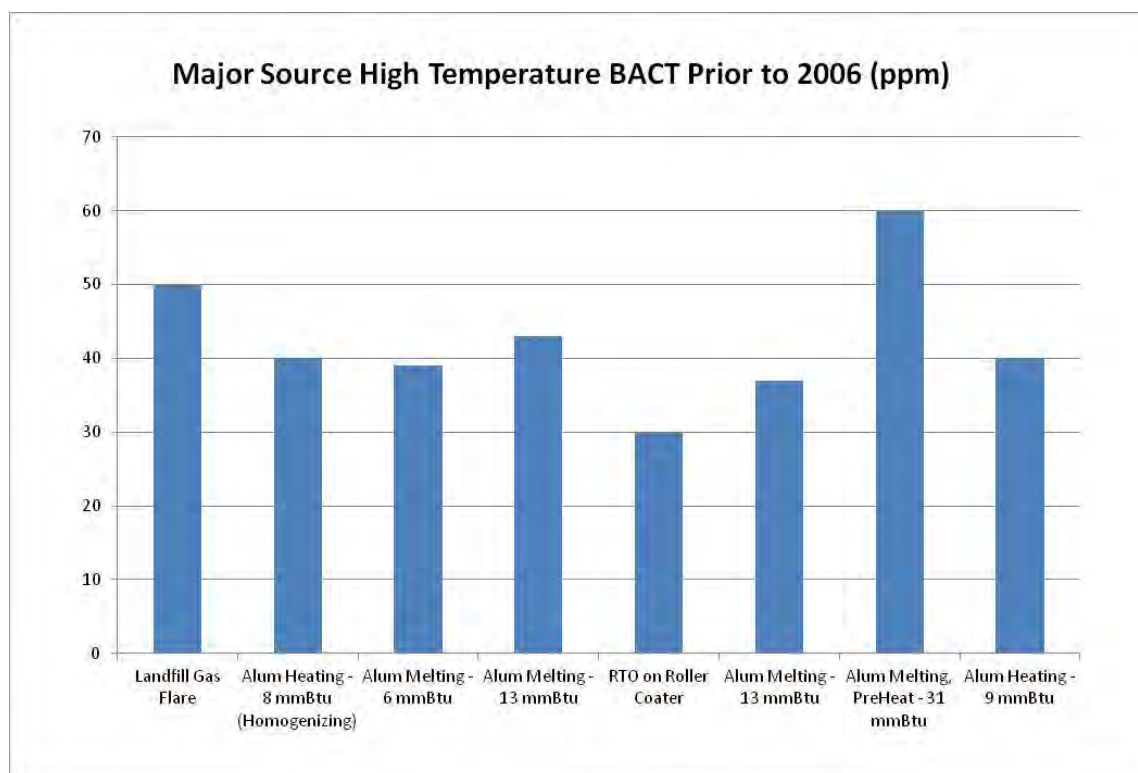


Figure B-5

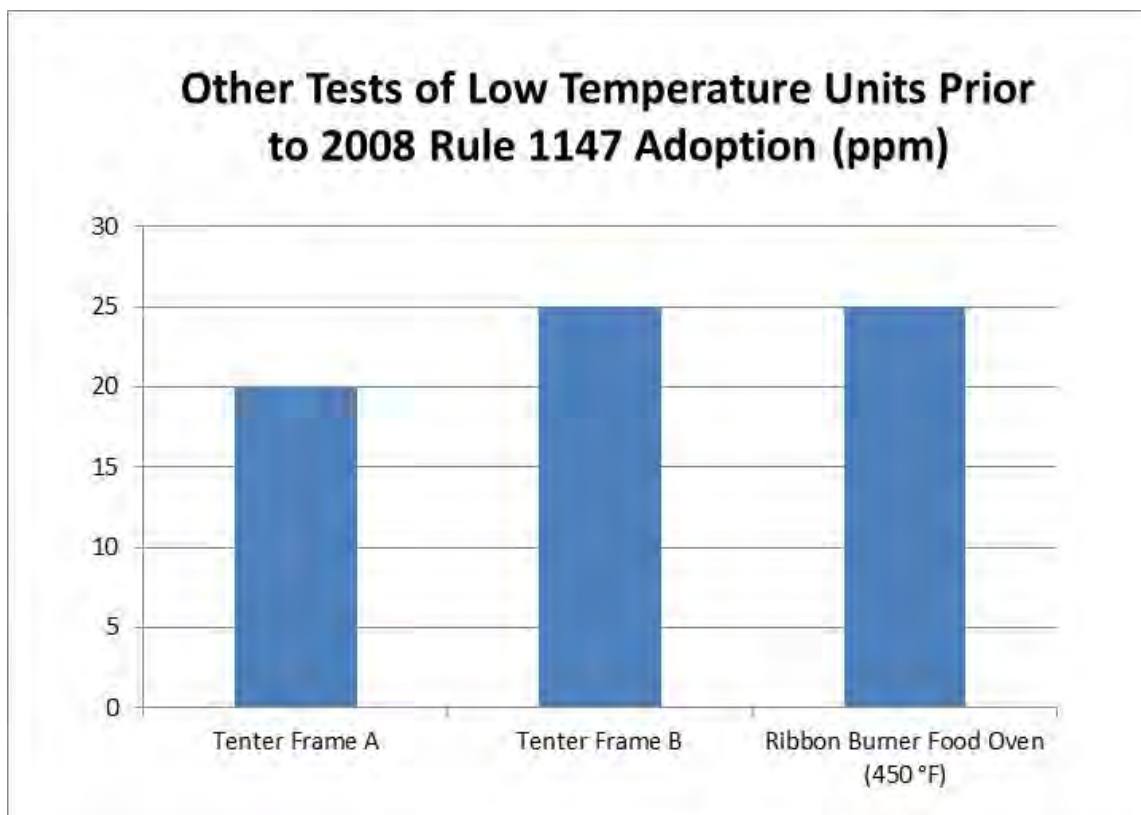


Figure B-6

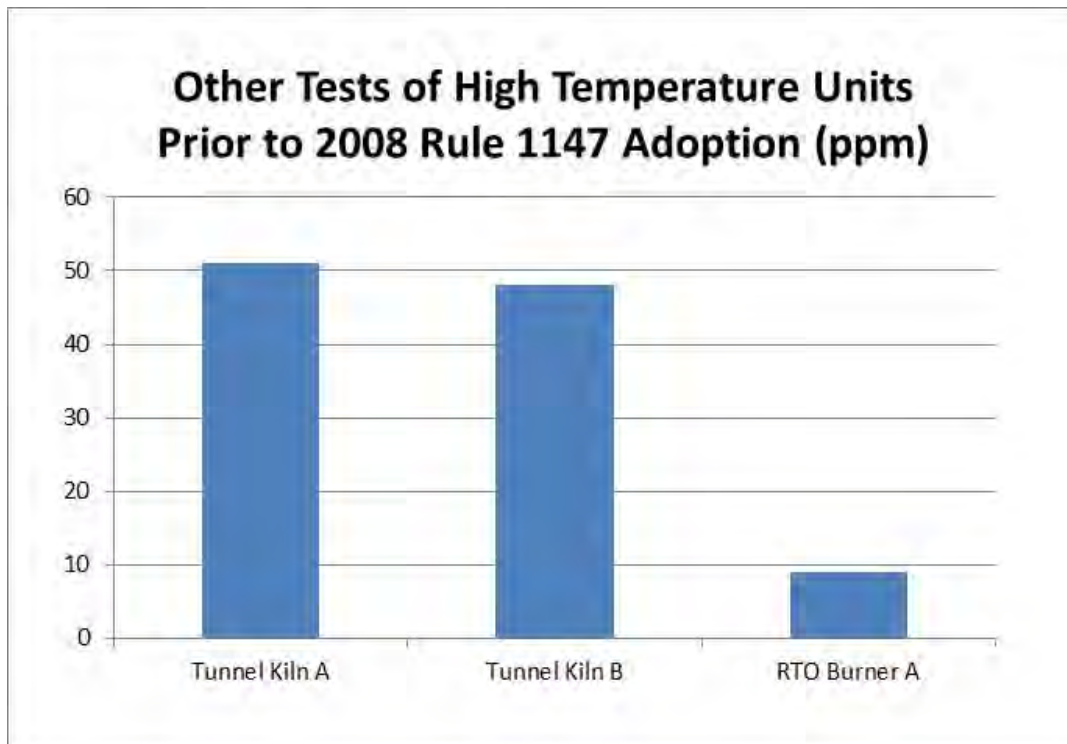


Figure B-7

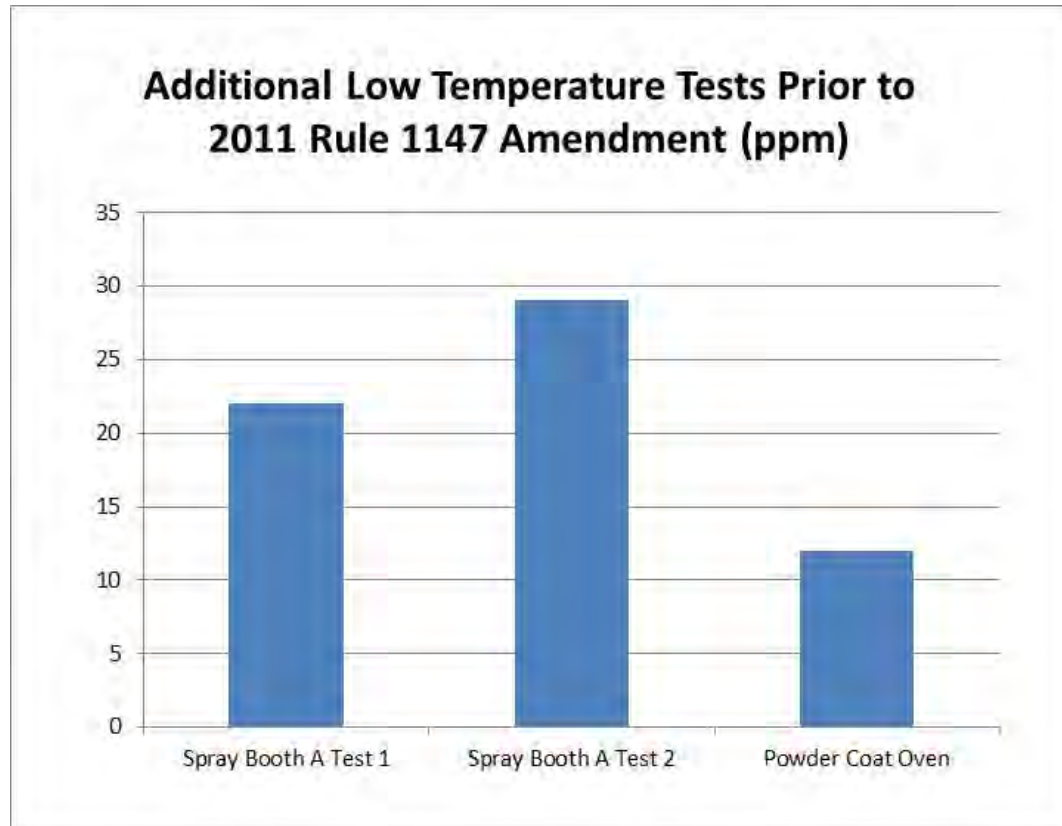
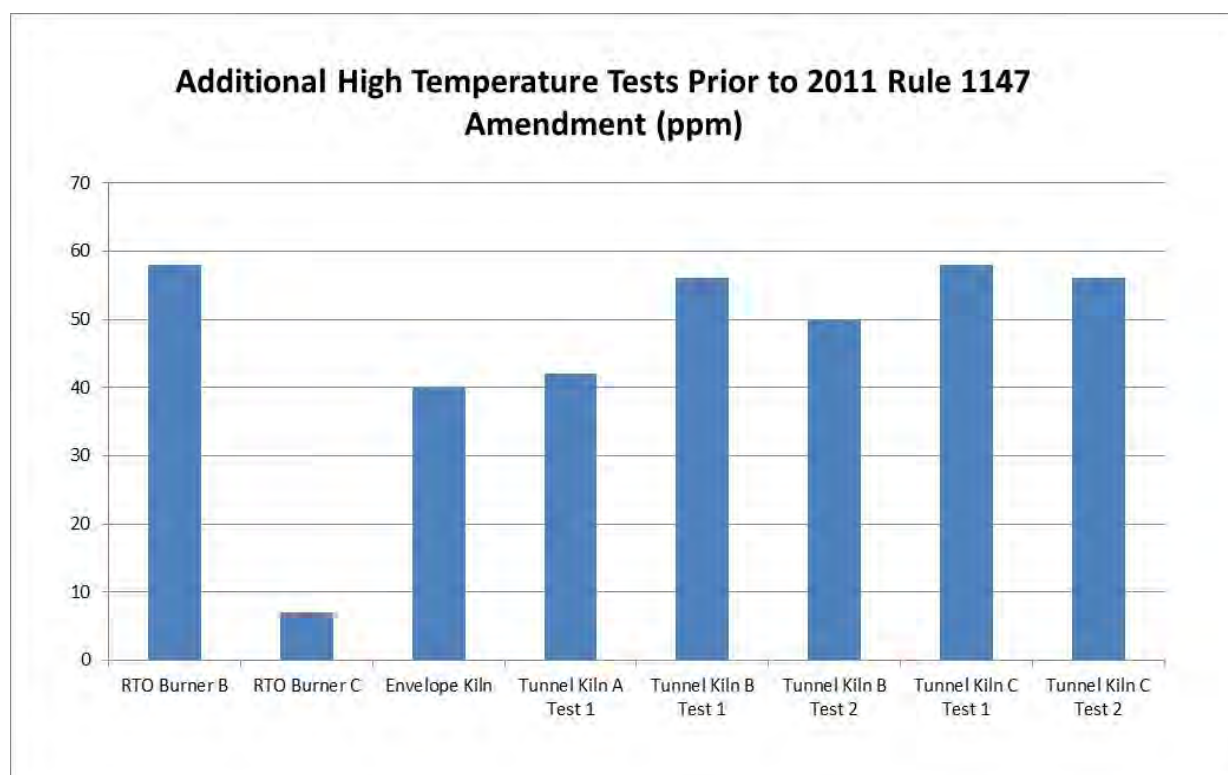


Figure B-8



## Appendix C –Rule 1147 Emission Testing and Test Limitations

## **RULE 1147 EMISSION TESTING AND TEST LIMITATIONS**

Demonstrating compliance with emission or other limits is required for Rule 1147 and all federal, state and SCAQMD air pollution regulations. In order for a new or amended SCAQMD rule to be approved for inclusion in the State Implementation Plan (SIP), test methods must be identified in the rule and approved by CARB and EPA. Rule 1147 identifies test methods that may be used to determine NO<sub>x</sub>, CO, O<sub>2</sub> and CO<sub>2</sub> concentrations and mass emissions.

In addition to EPA approved test methods, the SCAQMD also provides guidelines and generic test protocols to assist equipment owners and testing companies to prepare for and perform approvable emission tests. Because of the large variety of equipment regulated by Rule 1147, the equipment owner and the testing company must submit a test protocol and receive SCAQMD approval before testing a unit.

Emission testing can be more difficult for open direct fired units and dryers that heat large quantities of air because pollutant concentrations are diluted. Examples of these types of equipment include conveyor type ovens, textile dryers and drying ovens. Testing these units may require using a calibrated fuel meter in order to demonstrate compliance with the rule's fuel-based mass emission limit (pounds per million BTU of fuel) and additional sampling and analysis to determine carbon dioxide (CO<sub>2</sub>) concentrations in the exhaust. CO<sub>2</sub> concentrations are used as an alternative to O<sub>2</sub> concentrations in order to adjust NO<sub>x</sub> concentrations to the Rule 1147 reference level of 3% O<sub>2</sub> when exhaust oxygen (O<sub>2</sub>) concentrations are high (close to ambient levels),

The test results used for this report have been reviewed by SCAQMD Engineering, Compliance and Source Testing staff. When Rule 1147 emission testing protocols and test reports are reviewed by SCAQMD staff, they are rated as acceptable, conditionally acceptable, or unacceptable. Test reports are classified unacceptable when the report does not include all required documentation, the test was not performed consistent with the test method and approved protocol, or the test results cannot be used to demonstrate compliance with the applicable emission limit.

Tests reports are classified conditionally acceptable when the test results indicate compliance with the applicable emission limit but results are adjusted by SCAQMD staff, emissions cannot be estimated accurately but mass emissions or concentrations are equal to or less than the applicable emission limit or carbon monoxide (CO) emissions cannot be accurately determined. Rule 1147 does not include a CO emission limit because the SCAQMD is in compliance with federal and California ambient air quality standards. However, CO concentrations are routinely measured to ensure compliance with permit or facility requirements if applicable.

The most common reason for an emission test report to be rated conditionally acceptable is the reported emissions of NO<sub>x</sub> or CO have been adjusted by staff so results are consistent with SCAQMD testing and reporting guidelines. Mass emissions or concentrations may

be adjusted higher or lower but the adjusted results demonstrate compliance with the rule limit.

For many test results, emissions are expressed as less than a specific concentration or mass emission rate that demonstrates compliance with the applicable emission limit. In order to be considered accurate, SCAQMD guidelines require that test results fall between 20% and 95% of the concentration of the highest concentration (high span) calibration gas used for that pollutant for that test. When results are not within the test's acceptable range, they are adjusted up to 20% of the acceptable range if they are lower, additional calibration gasses are tested to expand the range or define a lower sub-range, or the test is repeated using a different set of calibration gasses.

Adjustment up to the low end of the acceptable range (20% of the high span calibration gas) is a common result for equipment with dilute pollutant concentrations and high O<sub>2</sub> concentration in the unit's exhaust. Although these test results can be used to demonstrate that pollutant levels are less than a specific concentration (i.e., the low end of the acceptable range), they cannot be used to accurately estimate concentration or mass emissions. When the estimated concentrations are lower than the acceptable range of the individual test but an adjustment up to 20% of the acceptable range is still less than or equal to the applicable emission limit, the test result is satisfactory for the needs of the client and no further calibration or testing is performed by the testing company.

Test results for CO are often adjusted up to 20% of the acceptable range and because most permits do not limit CO emissions, no further analysis for CO is performed. However, when CO concentrations are adjusted up to 20% of the acceptable range, the adjusted estimated CO concentration can be up to three orders of magnitude higher than the actual concentration.

In summary, testing is performed to demonstrate compliance with an emission limit and businesses and testing companies do enough calibration, testing and calculation to prove that pollutant concentration or mass emissions are below the applicable limit. Most Rule 1147 emission test results are adjusted by the testing company or SCAQMD staff to address issues with a test's acceptable range or with other testing and calculation issues. As a result, most test results can demonstrate compliance but cannot be used to accurately estimate concentrations or mass emissions from individual units and categories of equipment.

Table C-1 provides a summary of submitted Rule 1147 NO<sub>x</sub> emission test results that have completed SCAQMD staff review and demonstrated compliance with Rule 1147 emission limits as of March 2015. Table C-1 shows the number of test results and average NO<sub>x</sub> emission concentrations for units tested at the highest and at a low firing rate if applicable. In most cases the highest firing rate tested is the normal operating condition. However, in a small number of cases the low firing rate is the normal condition. The table also indicates the applicable NO<sub>x</sub> emission limit for each category of equipment. Table C-1 does not include results from tests that were subsequently repeated because the original test did not comply with test method or SCAQMD guidelines. In addition, the table does not



include test results for units that were shut down or that were withdrawn by the unit operator.

Table C-1  
Rule 1147 Emission Test Results

Equipment Category	Rule 1147 NOx Limit (ppm <sup>1</sup> )	Number of Units Tested at Normal/High Fire	Average NOx Concentration at Normal/High Fire (ppm)	Number of Units Tested at Low Fire	Average NOx Concentration at Low Fire (ppm)
Afterburner/Regenerative Thermal Oxidizer	30 or 60 <sup>2</sup>	13	26	4	13
Afterburner/ Thermal or Catalytic Oxidizer	30 or 60 <sup>2</sup>	9	40	1	41
Afterburner/Remediation Unit	60	2	23	1	24
Spray Booth (Automobile)	30	10	24		
Spray Booth (Other)	30	13	18	2	22
Crematory	60	20	50		
Dryer/Asphalt	40	1	35		
Fryer	60	7	29		
Fuel Cell Heater	30 or 60 <sup>2</sup>	1	11	1	9
Heated Tank	60	7	37	1	34
Metallizing Spray	30 or 60 <sup>2</sup>	1	22		
Metal Heat Treat	60	23	48		
Metal Melting (Large)	60	8	42	1	58
Metal Melting Pot/Crucible	60	5	54		
Multi-chamber Burn Off Oven or Furnace	30/60 or 60/60 <sup>3</sup>	11	42 <sup>4</sup>		
Multi-chamber Incinerator	30/60 or 60/60 <sup>3</sup>	1	54 <sup>4</sup>		
Oven/Dryer	30 or 60 <sup>2</sup>	112	20	35	21
Print Dryer/Oven	30	19	20	4	23
Textile Shrink Dryer	30	2	24		
Textile Tenter Dryer	30	4	23	4	26
Unit Heater	30 or 60 <sup>2</sup>	3	20	1	13
<b>Number of Units</b>		<b>272</b>		<b>55</b>	

<sup>1</sup> The Rule 1147 NOx limit is based on a reference level of 3% oxygen (O<sub>2</sub>) in the exhaust. All emission test results are converted to a concentration in parts per million at the reference level of 3% O<sub>2</sub>.

<sup>2</sup> The emission limit depends upon the process temperature.

<sup>3</sup> The emission limit for the primary chamber varies depending upon process temperature.

<sup>4</sup> Average NOx emissions measured after the secondary chamber (afterburner).

## Appendix D – Calculation of Cost Effectiveness

## **CALCULATION OF COST EFFECTIVENESS**

Cost effectiveness calculations for this document are performed using the methodology in SCAQMD's BACT guidelines and cost effectiveness analyses for rule development. Note that there is one key difference in the calculation of cost effectiveness between the BACT Guidelines and rule development. For rule development, a best estimate of equipment's useful life is used in the calculation of cost effectiveness instead of a fixed 10 year assumption that is associated with financing of new equipment. In addition, in rule development various emission control options are evaluated to determine the option that provides the most reductions and reasonable cost effectiveness.

For new source review (NSR) under SCAQMD Regulation XIII, equipment for which BACT is defined must meet the emission limits defined by BACT regardless of the cost. This applies to equipment at both major and non-major sources (facilities). However, for permit applications for new equipment without established BACT at non-major sources, SCAQMD staff is required to evaluate the cost effectiveness of emission reduction options. New, modified or relocated equipment with a potential to emit of one pound per day or less are not required to comply with BACT by the SCAQMD.

The cost effectiveness analysis determines which emission reduction options are below the SCAQMD Board approved maximum cost effectiveness limits established by the SCAQMD BACT committee for equipment without minor source BACT. In addition, the SCAQMD BACT guidelines and rule development are required to calculate incremental cost effectiveness for the difference in cost and emission reductions between two or more emission control options. The cost effectiveness criteria for processes that do not have an established BACT is currently about \$27,000 per ton of NO<sub>x</sub> for average cost effectiveness and about \$81,000 per ton of NO<sub>x</sub> for the incremental cost effectiveness between two or more control options. A copy of the section of the SCAQMD BACT Guidelines that discusses calculation of cost effectiveness is included in Attachment 1 of this appendix.

Attachment 1 of Appendix D – Cost Effectiveness Methodology from  
Part C: Policy and Procedures for Non-Major Polluting Facilities of July  
2006 SCAQMD Best Available Control Technology Guidelines

## Attachment 1

### Cost Effectiveness Methodology

Cost effectiveness is measured in terms of control costs (dollars) per air emissions reduced (tons). If the cost per ton of emissions reduced is less than the maximum required cost effectiveness, then the control method is considered to be cost effective. This section also discusses the updated maximum cost effectiveness values, and those costs, which can be included in the cost effectiveness evaluation.

There are two types of cost effectiveness: average and incremental. Average cost effectiveness considers the difference in cost and emissions between a proposed MSBACT and an uncontrolled case. On the other hand, incremental cost effectiveness looks at the difference in cost and emissions between the proposed MSBACT and alternative control options.

Applicants may also conduct a cost effectiveness evaluation to support their case for the special permit considerations discussed in Chapter 2.

### Discounted Cash Flow Method

The discounted cash flow method (DCF) is used in the MSBACT Guidelines. This is also the method used in the 1999 Air Quality Management Plan. The DCF method calculates the present value of the control costs over the life of the equipment by adding the capital cost to the present value of all annual costs and other periodic costs over the life of the equipment. A real interest rate\* of four percent, and a 10-year equipment life is used. The cost effectiveness is determined by dividing the total present value of the control costs by the total emission reductions in tons over the same 10-year equipment life.

### Maximum Cost Effectiveness Values

The MSBACT maximum cost effectiveness values, shown in Table 4, are based on a DCF analysis with a 4% real interest rate.

**Table 4: Maximum Cost Effectiveness Criteria (Second Quarter 2003)**

Pollutant	Average (Maximum \$ per Ton)	Incremental (Maximum \$ per Ton)
ROG	20,200	60,600
NOx	19,100	57,200
SOx	10,100	30,300
PM <sub>10</sub>	4,500	13,400
CO	400	1,150

The cost criteria [in Table 4] are based on those adopted by the AQMD Governing Board in the 1995 BACT Guidelines, adjusted to second quarter 2003 dollars using the Marshall and Swift Equipment Cost Index. Cost effectiveness analyses should use these figures adjusted to the latest Marshall and Swift Equipment Cost Index, which is published monthly in Chemical Engineering.

\* The real interest rate is the difference between market interest rates and inflation, which typically remains constant at four percent.

### Top Down Cost Methodology

The AQMD uses the top down approach for evaluating cost effectiveness. This means that the best control method, with the highest emission reduction, is first analyzed. If it is not cost effective, then the second-best control method is evaluated for cost effectiveness. The process continues until a control method is found to be cost-effective.

AQMD staff will calculate both incremental and average cost effectiveness. The new MSBACT must be cost effective based on both analyses.

### Costs to Include in a Cost Effectiveness Analysis

Cost effectiveness evaluations consider both capital and operating costs. Capital cost includes not only the price of the equipment, but the cost for shipping, engineering and installation. Operating or annual costs include expenditures associated with utilities, labor and replacement costs. Finally, costs are reduced if any of the materials or energy created by the process result in cost savings. These cost items are shown in Table 5. Methodologies for determining these values are given in documents prepared by USEPA through their Office of Air Quality Planning and Standards (OAQPS Control Cost Manual, 4th Edition, USEPA 450/3-90-006 and Supplements).

The cost of land will not be considered because 1) add-on control equipment usually takes up very little space, 2) add-on control equipment does not usually require the purchase of additional land, and 3) land is non-depreciable and has value at the end of the project. In addition, the cost of controlling secondary emissions and cross-media pollutants caused by the primary MSBACT requirement should be included in any required cost effectiveness evaluation of the primary MSBACT requirement.

**Table 5: Cost Factors**

#### Total Capital Investment

Purchased Equipment Cost	Indirect Installation Costs
Control Device	Engineering
Ancillary (including duct work)	Construction and Field Expenses
Instrumentation	Start-Up
Taxes	Performance Tests
Freight	Contingencies
Direct Installation Cost	
Foundations and Supports	
Handling and Erection	
Electrical	
Piping	
Insulation	
Painting	

Total Annual Cost

## Direct Costs

Raw Materials

Utilities

- Electricity

- Fuel

- Steam

- Water

- Compressed Air

Waste Treatment/Disposal

Labor

- Operating

- Supervisory

- Maintenance

Maintenance Materials

Replacement Parts

## Indirect Costs

Overhead

Property Taxes

Insurance

Administrative Charges

Recovery Credits

Materials

Energy

## Appendix E – Afterburner Technologies



## AFTERBURNER TECHNOLOGIES

The afterburner category is comprised of a variety of technologies that are used to capture and incinerate VOCs, PM and toxic air contaminants. These include direct flame afterburners (often called an oxidizer or incinerator), regenerative thermal oxidizers (RTO) that heat a ceramic bed which oxidizes pollutants, and catalytic oxidizers which incinerate pollutants with the help of a catalytic matrix. Remediation systems for removing contaminants from soil or groundwater also use the same types of technologies to incinerate VOCs or toxic air contaminants.

Alternative non-combustion technologies for control of VOC, PM and toxic air pollutants are also available and include electrostatic precipitation, wet or dry scrubbers, carbon adsorption, and other filter media. Remediation systems and some other types of units may combine carbon adsorption or other technologies with a direct flame, catalytic or regenerative thermal oxidizer. An afterburner or oxidizer can also be as simple as a stack with a burner and pilot flame (i.e., a flare).

At the time of rule development, two sources of information were available to identify BACT for this category of equipment. BACT determinations had been made for flare based oxidizers. These determinations established a BACT/LAER limit for non-major and major sources of 50 ppm NO<sub>x</sub>. However, there were a significant number of flare based oxidizers that had been permitted with a 60 ppm NO<sub>x</sub> limit prior to that BACT determination. In addition, emission test results that varied across a range from below 30 ppm up to about 50 ppm NO<sub>x</sub> for new catalytic and regenerative thermal oxidizer systems were being used by the SCAQMD permitting group as the basis to require new applicants to meet equivalent emission limits. Given the variety of processes used as afterburners, their different emission characteristics and older equipment permitted at emission levels close to but above some current BACT levels, a rule NO<sub>x</sub> limit of 60 ppm was proposed for this category of equipment and adopted in Rule 1147.

Depending upon the type of afterburner system, different burners are used. Most of the RTOs tested use a high temperature Maxon Kinedizer burner but one uses an air heating burner from Eclipse – the Winnox burner. A Kinedizer burner is also used in a remediation unit that incorporates an RTO. Thermal and catalytic oxidizers use a variety of burners from Maxon, MidCo, Eclipse, and others. Some of these units use air heating burners and others use higher temperature burners such as the Eclipse Thermjet. A variety of burners are also used in remediation units that incorporate a thermal or catalytic oxidizer.

Newer flare based systems incorporate low NO<sub>x</sub> burners that can meet the 60 ppm NO<sub>x</sub> limit (e.g., John Zink and Flare Industries/Bekaert). However, RTO based systems offer a significant advantage over direct flame systems because they can significantly reduce fuel consumption and the cost of operating the system. Staff is aware of one facility that replaced an old flare based oxidizer with a new RTO in order to meet the Rule 1147 emission limit and to reduce fuel cost.

The afterburners that have been tested are used to control emissions from a wide variety of processes. Afterburners are widely used to control emissions of VOCs and PM from printing, coating and chemical manufacturing operations. Afterburners are also used for the control of VOCs from food bakery ovens and fryers. Larger coffee roasters are required to use afterburners to control emissions of PM, toxics and for odor control. One tested unit controls emission of PM from an animal feed dryer. Several of the tested units are portable and are used to control emissions of VOCs from degassing of storage tanks, pipelines and other equipment.

The 24 units tested easily passed the 60 ppm NO<sub>x</sub> limit. Most of the units were tested with their original burners. The RTO and remediation units have average NO<sub>x</sub> emissions of about 25 ppm at high fire with a range of 16 to 55 ppm. One unit with emissions of 55 ppm NO<sub>x</sub> has a Maxon Kinemax burner instead of a Kinedizer. Thermal and catalytic oxidizers averaged about 40 ppm NO<sub>x</sub> with a range of 21 to 54 ppm at high fire. Units with air heating burners including the Eclipse Winnox have lower emissions than units with high temperature burners such as the Eclipse Thermjet.

A large number of afterburner units using different combustion technologies have been tested and comply with the Rule 1147 NO<sub>x</sub> emission limit of 60 ppm. Most of the units complied with the emission limit using their original burners. The emission vary depending upon the combustion technology. However, all of the units for which tests were submitted and reviewed comply with the rule emission limit.

## Appendix F – Spray Booths

## SPRAY BOOTHS

A variety of coating operations use heated spray booths and prep stations. Prep stations are paint booths that are not fully enclosed. The majority of heated spray booths in the SCAQMD are auto body refinishing booths used for refinishing passenger cars and light trucks. Larger booths are used for industrial coating operations, large trucks and trailers and a variety of maintenance applications. In addition, auto body type spray booths are also used by manufacturing operations for drying and curing components and assembled products. An achieved in practice LAER/BACT limit of 30 ppm NO<sub>x</sub> for makeup air heaters in spray booth applications and the fact that many SCAQMD permitted booths are used as curing or drying ovens in manufacturing operations justified a Rule 1147 NO<sub>x</sub> limit of 30 ppm. It should be noted that BACT for ovens and most dryers has been 30 ppm NO<sub>x</sub> since 1998.

To date, only new or relocated spray booths have been subject to the Rule 1147 emission limit. Because more than 90% of in-use heated booths are estimated to have annual average emissions less than one pound per day of NO<sub>x</sub>, existing units are not subject to the emission limit until on or July 1, 2017. Most of the new booths have been installed in the SCAQMD are for auto body repair and have been permitted based on certification of the burner and related components of the makeup air unit for the booth.

Auto body repair businesses use paint booths for reducing the amount of spray leaving the facility and keeping dust off newly painted surfaces. In addition, booths speed up the drying process by moving air through the booth. Spray booths can also be fitted with heating units that further accelerate the drying and curing of coatings.

Auto body repair businesses use heated booths in order to increase the number of painted cars that can be dried in a day. Businesses that coat four or more cars a day use heated booths. About three painted cars can be dried each day with an unheated booth. According to spray booth vendors, the average number of cars dried per day in a spray booth is about five. The maximum number of cars that can be processed by a heated booth during one shift is eight. Some auto body repair businesses operate more than one shift per day thus increasing the number of cars processed.

### Technology

Ten booths used in auto body repair from a variety of manufacturers have been tested as part of the process to certify a company's spray booth heating systems. These certified units comply with the Rule 1147 emission limit of 30 ppm NO<sub>x</sub> and with workplace exposure standards for CO. To date, all of the certified spray booths have used a burner system from MidCo. This new low NO<sub>x</sub> burner replaced line burners in a number of booth manufacturers heating units. Many of the previous units were built around a MidCo line burner. Since 2010, more than 125 low NO<sub>x</sub> heating systems based on the MidCo low NO<sub>x</sub> burner have been installed in the SCAQMD. The majority of these have been installed in heating units for new auto body spray booths.

Several spray booth manufacturers have taken advantage of the option to certify their booths and heating system. Certified models do not require individual emission tests. Currently there are 32 models of booths and heating systems from eight manufacturers certified compliant with the Rule 1147 emission limit. Non-certified models must perform individual tests in order to receive an SCAQMD permit. The SCAQMD certified systems vary from basic cross flow booths to down flow booths constructed with below ground air exhaust systems. The manufacturers represent a significant portion of the industry and include companies that manufacture their booths and heating systems in California.

The SCAQMD permitting group certifies the whole spray booth mechanical system including the combustion components. This approach significantly increases the cost of retrofitting existing spray booths with certified low NOx burners. To use an SCAQMD certified burner on a used spray booth, the owner/operator must also install a new heater box, blower, other mechanical components with a new thermostat and control system for moving air in addition to installing the burner, mounting hardware and combustion control system.

Other manufacturers have decided not to certify their heating units, but instead have decided to have their distributors and local installers test each new installation. For example, three auto body booths at one location have been tested and complied with the Rule 1147 NOx limit using a newer design line burner from Maxon.

Other types of booths and some auto body booths used for different applications have also been tested and comply with the Rule 1147 emissions limit. These units submitted individual emission test results. Thirteen test results have been submitted for booths that are not used for auto body repair. These booths use heating units or burners from Hastings, MidCo, PowerFlame, and Riello. In these cases, the air movement system and other components were not required to be replaced by the SCAQMD.

The burners in these other booths use a variety of technologies to achieve the emission limit of 30 ppm. The heater manufactured by Hastings is a roof mounted unit that can also be used to heat other processes or large building spaces such as a warehouse. All of the burners in these systems use premixing of air and fuel with a controlled amount of excess air to reduce emissions. The MidCo burner uses a knit steel fabric material to stabilize and spread the flame over a larger surface area to reduce peak flame temperature and NOx emissions. The Hastings, PowerFlame and Riello burners use premixing, swirl for mixing with air in the combustion zone and other technologies to keep emissions low. The new control systems for these low NOx burners can be the most important component of the system because they provide more precise tuning and control of the combustion process across the firing range of the burner.

### **Cost Effectiveness of Rule Compliant Spray Booth Heating Systems**

NOx Emissions for most auto body spray booths average less than one half pound per day on an annual basis. NOx emissions contribute to the formation of secondary particulates in addition to ozone. A typical booths' annual average NOx emissions are less than one

third pound per day. However, during late fall and winter when PM 2.5 concentrations can be high, daily NOx emissions can be two to three times annual average emissions.

The cost difference between a new certified rule compliant heated spray booth and a new non-compliant unit is less than \$10,000 on typical new booth based on information from manufacturers, vendors and the cost of booths prior to rule adoption. The cost for new units includes markups from the booth manufacturer applied to the cost of the burner, gas train and control system. Most of the specialty booths used for applications other than auto body repair were tested with standard burners, so there was no additional equipment cost to comply with Rule 1147 limits. However, the cost for adding a new natural gas fired certified heating system to an existing spray booth varies from \$30,000 to \$50,000 with a typical cost of about \$40,000. The cost varies depending upon the manufacturer, type of booth and the individual installation.

The cost of new booths are highly variable depending upon the type of booth and options. According to vendor supplied information, the cost to purchase and install a new spray booth is about 20% higher than in 2008 when Rule 1147 was adopted. This increase is consistent with industry data on the cost to purchase and install new equipment (i.e., Marshall & Swift Equipment Cost Index which includes inflation, the cost of materials and manufacturing costs). The typical new installation is a semi down draft (side draft) booth with for about \$80,000. A new basic cross draft booth without recirculation is less and costs \$65,000 to \$80,000. However, some vendors do not sell heated cross flow booths. The heating system and installation cost of the booth and heating constitute most of the cost for a new basic cross draft booth. A new full down draft booth is about \$115,000 and up depending upon options. Although the cost for semi down draft and down draft booths are higher than for a basic cross draft, the heating system costs are about the same for basic and premium booths from the same manufacturer or vendor.

The cost effectiveness for a new SCAQMD certified low NOx auto repair booth is at most \$22,000 per ton  $[(\$10,000 \text{ at most}) / (70\% \text{ reduction in NOx}) \times (0.25 \text{ lb/day} / 2000 \text{ lb/ton}) \times 260 \text{ days/year} \times 20 \text{ years}]$ . In higher volume shops, the cost effectiveness is better (lower than \$22,000/ton).

The cost to retrofit a used booth to install in the SCAQMD as a new permitted unit is significantly less than purchasing a new booth. However, the cost effectiveness for retrofitting an existing in-use auto repair booth with a SCAQMD certified heating system is \$88,000 per ton of NOx reduced based on a cost of \$40,000 and a 20 year life. The cost of the heating system ranges from \$30,000 to \$50,000. For a high volume booth used two shifts a day, the cost effectiveness could be less than half this value (\$44,000/ton). For a booth retrofit costing \$30,000 the cost effectiveness is \$66,000 per ton. This cost effectiveness of retrofitting an existing permitted booth is higher than the minor source average cost-effectiveness criteria of \$27,000 per ton used by SCAQMD for equipment without defined BACT. Depending upon the number of cars processed per day, the retrofit cost effectiveness may also be higher than the BACT incremental cost effectiveness criteria of \$81,000 per ton.

It must be noted that depending upon the age of the used booth, the owner may have to upgrade the booth to meet current building and safety codes. The local building and safety agency may require mechanical, electrical, fire safety and other components be upgraded or replaced. These costs are not attributable to Rule 1147 and are also not included in the cost effectiveness analysis for new, modified or relocated units that require a new SCAQMD permit. The SCAQMD BACT Guidelines does not include the cost of compliance with non SCAQMD regulations in the calculation of cost effectiveness. The calculation of cost effectiveness is an analysis of the cost of new equipment and the cost of operating the new equipment. In the cost effectiveness analysis for new rule requirements, the recurring costs for new or modified equipment are those above and beyond the costs associated with original existing equipment.

The cost effectiveness for upgrading existing spray booths to comply with the Rule 1147 emission limit exceeds the minor source cost-effectiveness criteria of \$27,000 per ton used by SCAQMD for equipment categories without a defined BACT. However, the cost effectiveness for new units is at most \$22,000 per ton and is less than the BACT Guidelines criteria. Because the cost effectiveness to retrofit an existing permitted booth is significantly higher than the minor source BACT criteria, staff is considering amending Rule 1147 to delay compliance for existing in-use permitted booths and heating units until they are modified (modification of the combustion or air circulation system), relocated (including moved to a different location within the facility) or replaced. Staff is proposing that new, modified, or relocated units requiring an SCAQMD permit continue to be required to comply with the Rule 1147 NO<sub>x</sub> limit at the time of modification or installation. A change of ownership in a business with an existing in-use permitted booth would be exempt from the retrofit requirement unless the booth or heating unit is modified, relocated or replaced.

## Appendix G – Crematories



## CREMATORIES

Twenty crematories have been tested and comply with the Rule 1147 NO<sub>x</sub> emission limit. This list includes units tested with their original burners and units tested after replacing their burners. The burners tested in these units are manufactured by Eclipse, Facultatieve and others. The most common burner installed for new units in the SCAQMD and for replacing old burners is the Eclipse Thermjet, a medium to high velocity burner used in many high temperature applications including kilns, metal melting, heat treating and burn off furnaces.

Crematories are constructed as two integrated chambers each with their own burners. The first chamber is used for incineration and the second is an afterburner for reducing emissions of PM, VOCs and odors. Typically both chambers use the same type of high temperature burner but the size and number of burners in each chamber may differ. The primary chamber typically has one or two smaller burners than the one burner used in the secondary chamber afterburner section.

The Rule 1147 NO<sub>x</sub> emission limit for crematories is 60 ppm. The NO<sub>x</sub> emission concentrations for the tested crematories average 50 ppm with a range from 30 to 59 ppm. The 20 crematory tests that have been reviewed and comply with the emission limit include those with original burners and many units with new burners and control systems. Many crematories more than 20 years old had burners that are no longer produced and would not comply with the Rule 1147 emission limit. However, those crematories replaced their burners and comply with the 60 ppm NO<sub>x</sub> emission limit. Most crematories less than 20 years old have been installed with burners that comply with the Rule 1147 NO<sub>x</sub> emission limit and will not require replacement a retrofit. These units will only be required to demonstrate compliance through an emissions test.

The Rule 1147 test program has demonstrated that the NO<sub>x</sub> emission limit of 60 ppm is achieved by the burners and combustion control system available since the late 1990s. Crematories that have had their burners replaced use the same burners that are installed in new units. The average emission concentration from the tested units is 50 ppm and some units are significantly lower.

## Appendix H – Fryers

## **FRYERS**

There are two major types of fryers – conveyor and batch type. In addition, there are different types of heating systems including immersion tube heating in conveyor units and external oil heating systems for many batch type fryers. The external oil heaters use a heat exchanger with a gas fired burner or another heat source such as a thermal fluid heater regulated by SCAQMD Rules 1146.1 or 1146.2. Both types of fryers and heating systems have been tested and comply with the rule 1147 emission limit.

Seven existing in-use fryers have completed emission testing and comply with the Rule 1147 NO<sub>x</sub> emission limit of 60 ppm. The tested units are from three different manufacturers. All units were tested with their original burner systems. One unit is a conveyor fryer with many small immersion tube burners and a total heat rating of 1.5 mmBtu/hour. The other units use single burners with a heat exchanger and have heat ratings from 1.5 to 2.5 mmBtu/hour. The average NO<sub>x</sub> emissions are about 30 ppm with a range from 14 ppm to 56 ppm.

A variety of systems from three different manufacturers have been tested and comply with the Rule 1147 NO<sub>x</sub> emission limit. The units complied with the 60 ppm using different types of heating systems. Based on the units completing testing, the Rule 1147 emission limit is achievable with the original heating systems installed for these fryers.

## Appendix I – Heated Process Tanks

## HEATED PROCESS TANKS

Heated process tanks, parts washers and evaporators are a category of 1147 equipment for which it is difficult to accurately estimate the number of units that are subject to Rule 1147. While evaporators and parts washers with an integrated heated tank are typically separate units with their own permit, most process tanks are permitted as part of a process line with other processes and tanks. Because Rule 1147 only applies to units that require a permit; an individual tank is only subject to Rule 1147 if it is heated by burners and either has emissions of VOC, PM or toxic air contaminants or the rating of the burner system is greater than two million BTU per hour (2 mmBtu/hour).

For example, tanks with mixing from an air sparging system are more likely to have VOC, PM or toxic emissions and require emission controls and a permit than those that do not. Otherwise a tank is exempt from the requirement for a permit as defined by SCAQMD Rule 219. However, if a process tank does not require a permit, it is still included in the description of a process line in order to provide a complete description of the process for SCAQMD permitting and compliance staff. Process lines are permitted as one unit in order to reduce the cost and administrative burden of permits.

There are approximately 1,400 process tanks identified in the SCAQMD permit system. About 1,200 of them are unheated, heated electrically or heated by a boiler. Of the remaining 200, at least 160 have burners rated less than the size requiring a permit. The number of heated process tanks subject to Rule 1147 is estimated to be between 20 and 40 with a best estimate of 25 units. The heat ratings of process tanks subject to Rule 1147 varies from 2.2 to 9 mmBtu/hour. Staff has also identified 23 evaporators with SCAQMD permits that are potentially subject to Rule 1147. There are also an unknown number of parts washers that are potentially subject to Rule 1147 depending upon their size, configuration and emissions. Tanks, evaporators and washers with electric, boiler steam or thermal fluid heating are exempt from Rule 1147. Equipment heated using a separate enclosed heated tank are potentially subject to SCAQMD Rules 1146, 1146.1 or 1146.2 which regulate boilers and enclosed process heaters.

Many heated process tanks, evaporators and parts washers use immersion heating tubes to heat a solution in a tank. Immersion tube burners fire into and heat a tube and that heat is transferred to the solution from the tube by conduction and convection. The efficiency of heat transfer depends upon the diameter and length of the tube. The efficiency of heat transfer in a tank system can vary from about 60% to over 90%.

To date only a few heated process tanks and evaporators have performed testing because some were installed within the last 15 years, others have emissions less than or equal to one pound per day and most are exempt because they do not require a permit. Seven units have been tested and reviewed by SCAQMD staff. None of these units replaced their burners. All tested units comply with the Rule 1147 NOx limit of 60 ppm for heated process tanks, evaporators and washers with their original burners.

Process tanks, evaporators and washers with their own burners use a variety of heat exchange systems to heat a solution or assist in evaporation. Most process tanks use a constant diameter tube to heat a solution. Evaporators either use custom designed air to solution heat exchangers or constant diameter tubes to provide heat to a solution. Most parts washers use a custom designed heat exchange system or a separate water heater.

Custom designed heat exchange systems have various configurations but start out with a combustion zone with a larger cross section than the remainder of the heat exchanger. These systems typically start with a combustion chamber that is about 8 to 16 inches across that extends the full length of the burner's flame. The combustion section of the heat exchanger is large because manufacturers use burners that are designed for a wide variety of applications including boilers, furnaces and ovens.

Emission testing has been performed on three evaporators using custom designed heat exchangers – two units from Encon using MidCo burners and one unit from Lakeview Engineering unit using a burner from Industrial Combustion. The heat input for these systems are 220,000 and 650,000 Btu/hour for the Encon evaporators and 1.5 mmBtu/hour for the unit built by Lakeview Engineering. NO<sub>x</sub> emission for these units ranged from 25 to 52 ppm.

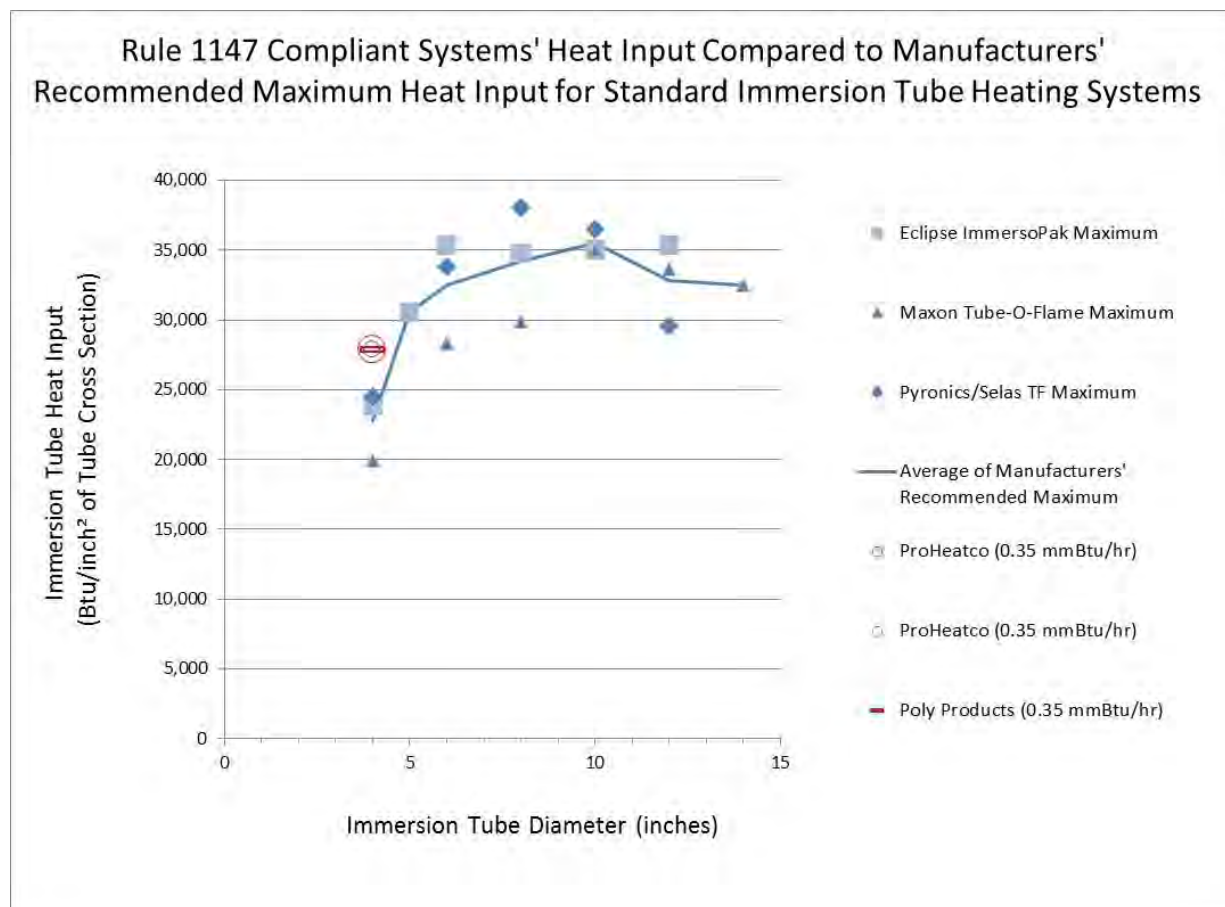
Most process tanks and some evaporators use a constant diameter tube system and immersion tube burners to heat the solution tank. However, there are three types of heat exchange systems using constant diameter tubes. Each system has its own range of tube diameter depending upon the amount of pressure the burner produces and the allowable heat input to an individual tube. In addition, burners for these systems can be set up in a variety of ways depending upon the type of process tank. Burners can be set to fire at a maximum firing rate and off, fire at a high and low rate or modulate and fire across the whole range of the burner. Burners can also be set to fire at a fixed amount of combustion air or variable amount of combustion air in order to maintain a constant ratio of fuel and air over the firing range of the burner.

The most common heating tube system typically has tubes that vary from about four inches up to 14 inches in diameter. Burners for this system are available from many manufacturers including Eclipse, Maxon, Sela/Pyronics and Titan Engineering. The heat input in this type of system varies from about 20,000 to 30,000 Btu per square inch of tube cross section in four and five inch tubes and 25,000 to 40,000 Btu per square inch in six to 14 inch diameter tubes. Three of these systems have been tested – two heated evaporator tanks from Proheatco and one heated evaporator tank from Poly Products. All of these systems use a burner with a maximum rating of 350,000 Btu/hour and 4 inch diameter heating tubes. NO<sub>x</sub> emissions from these three units vary from 30 to 55 ppm. In addition, preliminary testing of a unit at another facility with a higher output burner of about 3 mmBtu/hour indicates that unit has NO<sub>x</sub> emissions of 40 to 50 ppm.

Figure I-1 provides a summary of burner and tube characteristics of the three tested units from Proheatco and Poly Products. The figure illustrates that the units have firing rates (heat input per square inch) near the maximum recommended by three major manufacturers

for the most common type of tube immersion tube heating burners. This metric is important because it impacts the formation of NO<sub>x</sub> in the heating tubes. The information presented in Figure I-1 and the emission test data indicate that it is technically feasible to comply with the Rule 1147 NO<sub>x</sub> limit with the most common type of immersion heating burners.

Figure I-1



A second type of tube heating system uses burners that produce higher pressures and can fire into smaller diameter tubes. This type of system uses tubes two to eight inches in diameter with heat inputs per tube cross sectional area double the heat inputs of the standard system discussed above. Eclipse, Maxon and PowerFlame manufacture burners for this type of application. There are currently no emission test results available for these types of burners so it is not possible to determine if they comply with the Rule 1147 NO<sub>x</sub> emission limit of 60 ppm.

A third type of tube heating system for process tanks has been installed in new heated tanks. This system has a new type of burner from Maxon (an XPO burner) that requires larger diameter tubes (14 inches and above). An SCAQMD approved emissions test on one of these systems (required for Regulation XIII and new source review) with a 3.3 mmBtu/hour burner showed emissions of 4 ppm NO<sub>x</sub> at high fire and 34 ppm at low fire.

The Rule 1147 testing program has identified three types of heating systems used in process tanks and evaporators that comply with the NO<sub>x</sub> emission limit. There is no information yet available for a fourth type of heating system that uses high pressure burners firing into smaller diameter tubes of 2 to 8 inches. A fifth type of tank heating system with tube firing burners used in heat treating also been demonstrated to meet the 60 ppm NO<sub>x</sub> limit but have not yet been tested in heated tank applications.

For all five types of tank heating systems, the burners and heat exchangers or tubes are designed as one integrated system. If an individual heated tank or evaporator system using any of the four systems does not comply with the emission limit, then the whole tank will likely have to be replaced. Delaying compliance for existing in-use units from the rule emission limit until the combustion system is modified or replaced will address the issue that it is not feasible to retrofit an existing heated tank with different burners. If a tank is retrofitted with new burners, the owner will replace the heating tubes or heat exchanger. If the owner rebuilds a process tank, then a rule compliant system can be installed at that time.

SCAQMD staff is considering to amend Rule 1147 to delay compliance with the NO<sub>x</sub> emission limit for existing in-use process tanks, evaporators and parts washers with an integrated heated tank until the combustion system is modified or replaced. New units would still be required to meet the emission limit unless the total unit heat rating is less than or equal to 325,000 Btu/hour. Staff estimates this change would affect less than 50 heated tanks and evaporators currently subject to the Rule 1147 emission limit. There are more than 1,200 process tanks which are not subject to Rule 1147 requirements because they are exempt from the requirement for a permit by SCAQMD Rule 219, are unheated or are heated electrically or with a boiler.



## Appendix J – Heat Treating

## HEAT TREATING

Heat treating typically involves heating metals or alloys in a furnace or oven in order to develop specific properties in the metal or alloy before and after a part is made. However, heating can also be used to treat metals and nonmetallic refractory materials in a manufactured vessel, furnace or other product using temporary burners systems. The burners used in these systems are the same kinds of burners used in direct fired heat treating furnaces and kilns. Kilns are used for heat treating products made from ceramics, clay and other non-metallic materials.

Metal heat treating temperatures vary from a few hundred degrees Fahrenheit, used in tempering, to over 2,100 degrees for forging steel and titanium. With the exception of tempering, steel and titanium alloy heat treatments are typically at higher temperatures than for non-ferrous alloys based on aluminum. Kilns processing non-metallic materials also vary temperature depending upon the material and final product.

The type of burners used for heat treating depend upon the temperature required and whether they fire directly into the furnace or into tubes and heat is then transferred from the tubes to the furnace by fans. Lower temperature heat treating ovens have burners that are typically found in other types of ovens including air heating burners such as Eclipse Winnox and Maxon Cyclomax burners. Higher temperature direct fired furnaces typically use a different type of burner with a higher flame velocity, longer flame length and more radiant heat output for heating refractory material in the furnace or the tubes they fire into. High velocity burners are also used because they increase mixing and eliminate temperature stratification in direct fired furnaces. The new control systems for these low NOx burners are an important component of the system because they provide more precise tuning and control of the combustion process across the firing range of the burner.

Indirect fired furnaces typically have specialized tube firing burners. However, high velocity burners, similar to those found in direct fired applications, have also been used in indirect fired furnaces permitted in the SCAQMD. Temperature stratification in indirect fired furnaces is avoided because large fans move the air in the furnace past the tubes and into the section where the material being treated is held. High velocity and tube firing burners are available from many manufacturers including North American/Fives, Bloom, Eclipse, Maxon, Hot Work, Hauck, Industrial Combustion, and Selas. Tube firing burners from a number of manufacturers including Bloom, Hauck, North American/Fives, and Eclipse also have an option to add flue gas recirculation (FGR) to reduce NOx emissions.

Heat treating furnace designs have evolved over time. Newer furnace designs have more and smaller burners than many earlier designs. For both direct and indirect fired furnaces, more burners provide better control of the temperature profile in the furnace. Finer control of the furnace temperature allows the operator to meet newer more stringent temperature uniformity requirements than those that were in existence when older furnace designs were first built. Some of the older furnace designs predate modern temperature uniformity standards developed since the 1970s. The number and type of burners used in a furnace

depend upon the size of the furnace, type of heat treating, process temperature and temperature uniformity requirements of the heat treating processes performed by the furnace.

Figures J-1 to J-4 summarizes the size and number of burners in the heat treating furnaces that have successfully completed emission testing. This information indicates that most of the burners used have heat ratings of 0.5 mmBtu/hour (500,000 Btu/hour) or less and the largest burners are about 2 mmBtu/hour. The largest furnaces have a heat rating of about 8 mmBtu/hour. There are furnaces permitted in the SCAQMD with larger heat ratings, but they are found at facilities in the RECLAIM program and are exempt from Rule 1147.

Figure J-1

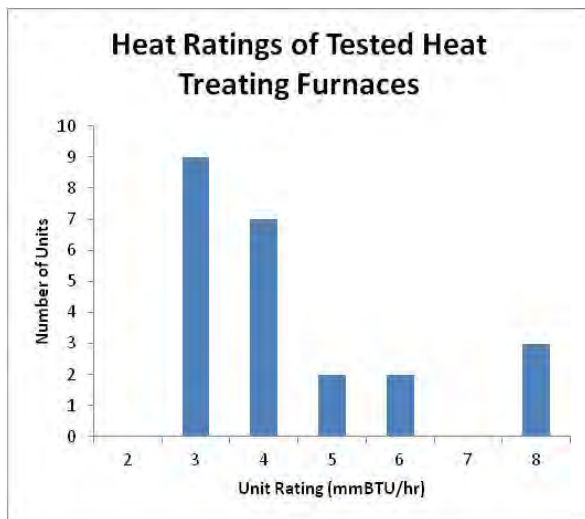


Figure J-2

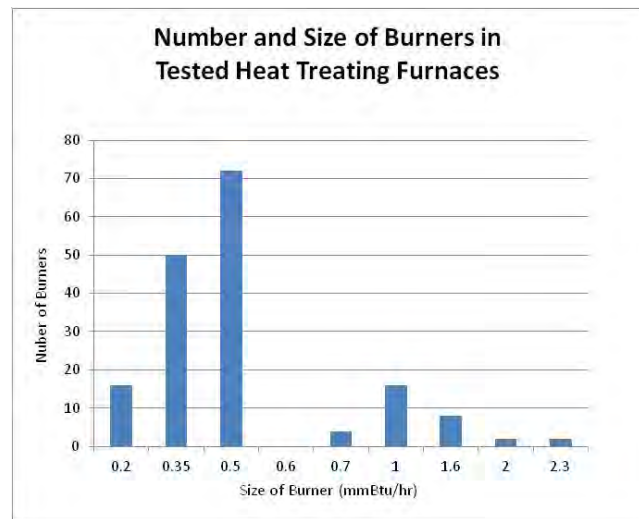


Figure J-3

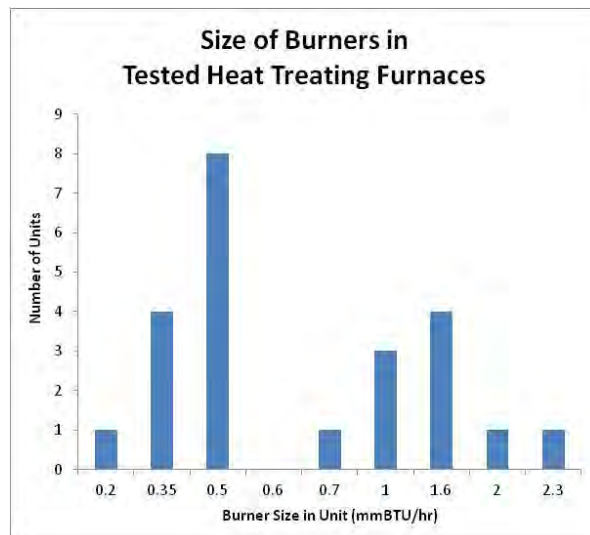
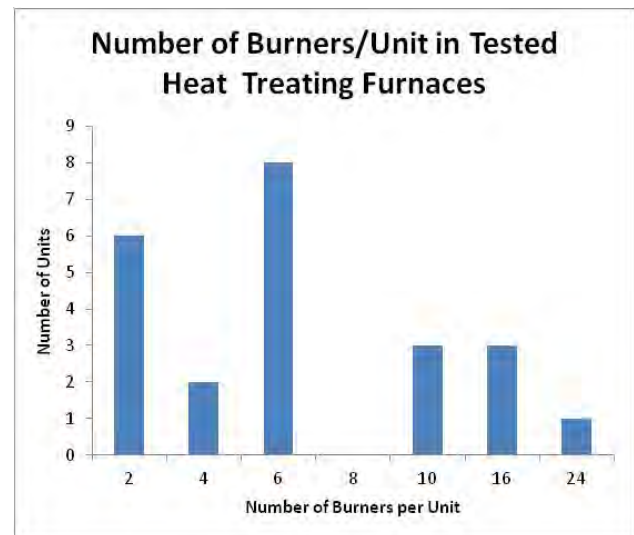


Figure J-4



The emission test results for heat treating furnaces indicate most furnace NO<sub>x</sub> emission concentrations are in the range from 45 ppm to 55 ppm with an average of about 50 ppm. These results cover a variety of furnaces processing aluminum and steel alloys across a broad temperature range. Some of the furnaces were new and were required to meet the new source BACT requirement of 50 ppm NO<sub>x</sub>, but most have been in use long before Rule 1147 was adopted in 2008 and before the BACT limit of 50 ppm was put in place in 2000. To date, only a few furnaces have had their burners replaced, added an FGR system or replaced their furnace in order to comply with Rule 1147. Most heat treating furnaces tested have met the Rule 1147 emission limit with their existing burners.

Kilns use the same burners that are found in direct fired heat treating furnaces and crematories. Kilns are used to heat treat clay, ceramic and other nonmetallic materials. Kilns are also used to heat treat glazes and other coatings applied to products made from these materials. Rule development staff have not yet received new emission test results for kilns from the Rule 1147 testing program. However, there were a number of emission tests completed on small and large kilns prior to rule adoption in 2008 and the rule amendment in 2011. These test results are summarized in Appendix B of this document. The emission test results demonstrate that a variety of kilns comply with the Rule 1147 emission limit of 60 ppm NO<sub>x</sub> with the burners installed prior to rule adoption. In addition, many small kilns are not subject to Rule 1147 because they are exempt from the requirement for a permit under SCAQMD Rule 219 (some of these use electric heat).

## Appendix K – Metal Melting

## METAL MELTING

A variety of metal melting furnaces are subject to Rule 1147. They include small pot and crucible furnaces for melting lead, lead alloys, aluminum, zinc and zinc alloys and larger units including kettle furnaces for galvanizing and reverberatory furnaces for melting aluminum. There are about 170 metal melting furnaces potentially subject to Rule 1147 NOx emission limits. Most of the furnaces subject to Rule 1147 melt non-ferrous metals and alloys. Furnaces for melting iron or making steel are often electric and therefore not subject to Rule 1147. There are also many furnaces at large facilities which are exempt from Rule 1147 because the facility is in the RECLAIM program.

To date, most of the metal melting furnaces tested complied with the Rule 1147 NOx limit with the burners in place when the rule was adopted. All of the larger kettle and reverberatory furnaces passed the emission limit with their original burners. However, one kettle furnace and one reverberatory furnace were recently built to replace older units and were subject to BACT under new source review. The four larger furnaces whose permits identified the burner manufacturer had Eclipse burners.

Of the five small pot and crucible melting furnaces tested, three furnaces met the emission limit with their original burners. The other two units had their burners replaced before testing. This type of furnaces can be built with burners from many manufacturers including Eclipse, Maxon, MidCo and others. One pot furnace had its original burner replaced with an Eclipse Ratio Air burner in order to comply with the NOx emission limit of 60 ppm. The new burner also had low CO emissions. A second company chose to replace two burners on a large pot furnace (2 mmBtu/hour originally) with one larger 2.4 mmBtu/hour Maxon Kinedizer LE burner, but it is not known whether the original burners would have met the Rule 1147 NOx limit. The burners were replaced in order to increase production of the furnace and to reduce fuel consumption and emissions. The new configurations was subject to BACT under new source review and complies with the Rule 1147 NOx emission limit and has low CO emissions.

The heat ratings of the pot/crucible furnaces tested ranged from 0.5 - 2.4 mmBtu/hour. The NOx emissions for these pot/crucible furnaces were in the range of 49 to 60 ppm. The eight kettle and reverberatory furnaces have unit heat ratings from 1.2 – 6 mmBtu/hour with emission ranging from 40 ppm to 53 ppm. However, the units greater than 4 mmBtu/hour have multiple burners rated 1.2 – 1.5 mmBtu/hour. The highest heat rating for a unit with one burner is 2 mmBtu/hour. There are furnaces with larger heat ratings permitted in the SCAQMD, but they are at facilities in the RECLAIM program and are exempt from Rule 1147.

The eight metal melting furnaces tested complied with the Rule 1147 NOx emission limit. Two of the units were new and built to replace old units. It is not known whether the old units would comply with the emission limit. One pot/crucible furnace was rebuilt with a larger burner to increase capacity. Another small pot furnace had its burner replaced to

comply with the Rule 1147 NOx emission limit. All of the unmodified units, the new units and the units with replaced burners complied with the rule emission limit.

## Appendix L – Multi-chamber Burn-off Ovens and Incinerators



## MULTI-CHAMBER BURN-OFF OVENS AND INCINERATORS

This category includes various equipment that are used for similar purpose but named differently. These units may be called burn-off or burn-out ovens, kilns or furnaces and incinerators. However, all of the units perform a similar function and operate in a similar fashion. They are built with a primary chamber for melting, vaporizing or pyrolyzing some material on a part or piece of equipment in order to recycle the material or component. Some units are used for incinerating material that cannot be reclaimed or must be incinerated prior to disposal. The primary chamber leads to an integrated secondary afterburner chamber that destroys particulate matter, carbon monoxide, VOCs and any other organic material that enter this afterburner section. The incinerated material is reduced to carbon dioxide and water vapor.

The Rule 1147 NO<sub>x</sub> emission limit for the primary chamber of a furnace depends upon the process temperature in this burn-off chamber. If the process temperature exceeds 800 °F, then the NO<sub>x</sub> emission limit in the primary chamber is 60 ppm. If the process temperature is lower, then the NO<sub>x</sub> limit is 30 ppm which is consistent with a typical oven or low temperature furnace operating at those temperatures. The NO<sub>x</sub> limit for the secondary afterburner chamber is 60 ppm NO<sub>x</sub> and the same as for other afterburners.

Twelve burn-off ovens, furnaces and incinerators have completed review of their test results. Most units were tested with original burners. The number of burners in these units varies from two to six burners and the most common configuration has two or three burners. The heat ratings of the units range from 0.5 to 2.2 mmBtu/hour. The average NO<sub>x</sub> concentration in the stack after the afterburner section is less than 45 ppm and the range is from 26 to 54 ppm.

Discussion with a local manufacturer of burn-off furnaces indicates that it is not possible to use the preferred type of burner and meet a 30 ppm emission limit in the primary chamber for a process temperature less than 800 °F. The typical burner that is used to remove materials from a part is the same type of high temperature medium to high velocity burner used in crematories, kilns, heat treating and some types of afterburners. These burners are designed to have NO<sub>x</sub> emissions in the 40 to 60 ppm range.

The manufacturer has tested a design with an air heating burner in the afterburner section to achieve emissions of less than 30 ppm in the secondary chamber and meet an average emission limit for the two chambers of less than 45 ppm NO<sub>x</sub>. However, this redesign will not achieve the required PM, VOC and carbon monoxide reductions in all applications. In addition, using the averaging provision of the rule may not always achieve compliance with the NO<sub>x</sub> limit. Company representatives have suggested that since it is not always possible to comply with the emission limit of 30 ppm in the primary chamber of these types of devices, the NO<sub>x</sub> limit in the primary chamber should be 60 ppm NO<sub>x</sub> regardless of the process temperature. SCAQMD staff agree with this assessment and are considering a rule change that the NO<sub>x</sub> emission limit in both chambers of this type of equipment should be

60 ppm at any process temperature. This change in the rule limit would affect a small number of equipment regulated by Rule 1147.

## Appendix M – Ovens and Dryers

## OVENS AND DRYERS

Excluding spray booth systems, the number of ovens and dryers under permit in the SCAQMD is slightly less than 1,200 units. This is the second largest category of equipment regulated by Rule 1147. These units are used in a variety of processes including curing of coatings and other materials, drying coated and printed products, and drying materials. The oven or dryer can be a small enclosed batch oven with a heating system, a large walk in oven, a conveyor system with a coating tank or coating spray station followed by a heated oven, or a drying room with a unit heater. Some printing and all textile drying operations use large conveyor units with multiple burners for high speed production of large quantities.

There are a variety of burners used in ovens and dryers. Each type of burner has its own characteristic emission profile. For example, radiant infrared burners have low emissions and NO<sub>x</sub> concentrations are typically less than 20 ppm. The most common type of burners used are nozzle mixing air heating burners. Some of the same types of ovens use premix burners with a metal fiber fabric cylinder or panel as a flame holding surface. Other units are designed to use line type air heating burners. Some small ovens and large conveyor systems use many flat panel radiant infrared burners. Powder coating operations are one of the processes that use radiant burners. Radiant infrared burners are required to directly heat a part in order to melt and then cure the coating. Ovens in which combustion gases cannot come in contact with the produce use indirect fired heater units with an air to air heat exchanger to provide clean heated air to the oven. However, both direct and indirect-fired unit heaters can be used to provide heat and move air through large drying ovens or rooms.

Ovens subject to the Rule 1147 NO<sub>x</sub> emission limit use burners from a number of manufacturers. The most common burners used in the SCAQMD are line and nozzle mix burners manufactured by Eclipse and Maxon. Two thirds of the tested ovens and dryers use Maxon burners and one fourth of the units use Eclipse burners. Eclipse burners used in compliant ovens and dryers include the Eclipse Winnox and Linnox product lines. Maxon burners used in compliant ovens include several versions of the OvenPak series, the Cyclomax, the LN-4 line burner and the Kinedizer. However, low NO<sub>x</sub> burners from other manufacturers including MidCo, PowerFlame, Riello, and Yukon also comply with the Rule 1147 NO<sub>x</sub> emission limit. The newer control systems for these low NO<sub>x</sub> burners are the most important component of the combustion system because they offer more precise tuning and control of the combustion process across the firing range of the burner.

Most ovens and dryers tested use only one burner. However, coating, printing and curing lines often have multiple burners. Many coating and printing lines use two identical burners, but the oven section of a coating line can also have up to 40 infrared radiant panels.

The tested ovens' heat ratings varies across a wide range from 0.4 mmBtu/hour for a small batch oven up to 20.5 mmBtu/hour for a large rotary dryer. However, most ovens have ratings less than 2.5 mmBtu/hour. Most burners in ovens with multiple burners are also

less than 2.5 mmBtu/hour. The most common size of burner installed in all types of oven is 1.0 mmBtu/hour.

Figures M-1 through M-4 identify burner heat rating, number of burners and the range of the heat ratings for the tested units. Printing oven and textile dryer data is not included in Figures M-1 and M-2. Printing oven data is summarized in Figures M-3 and M-4.

Figure M-1

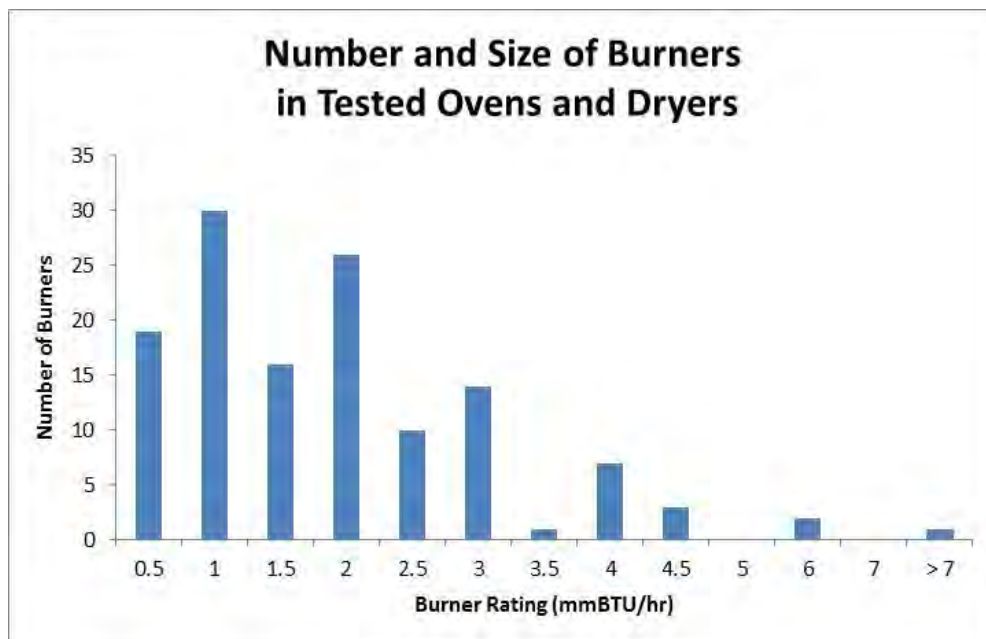


Figure M-2

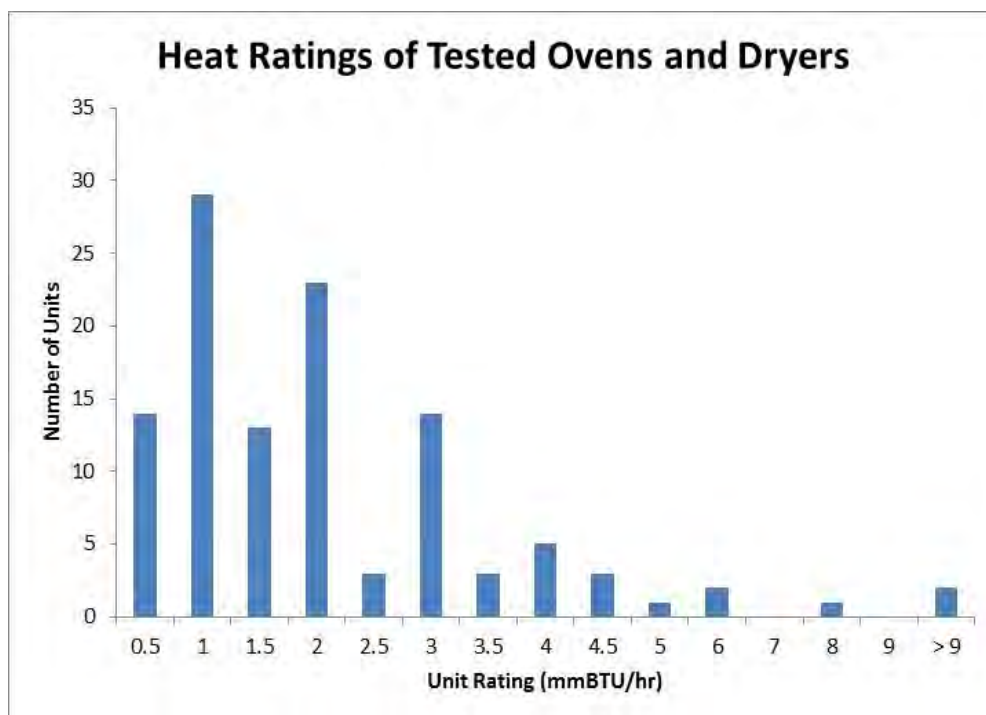


Figure M-3

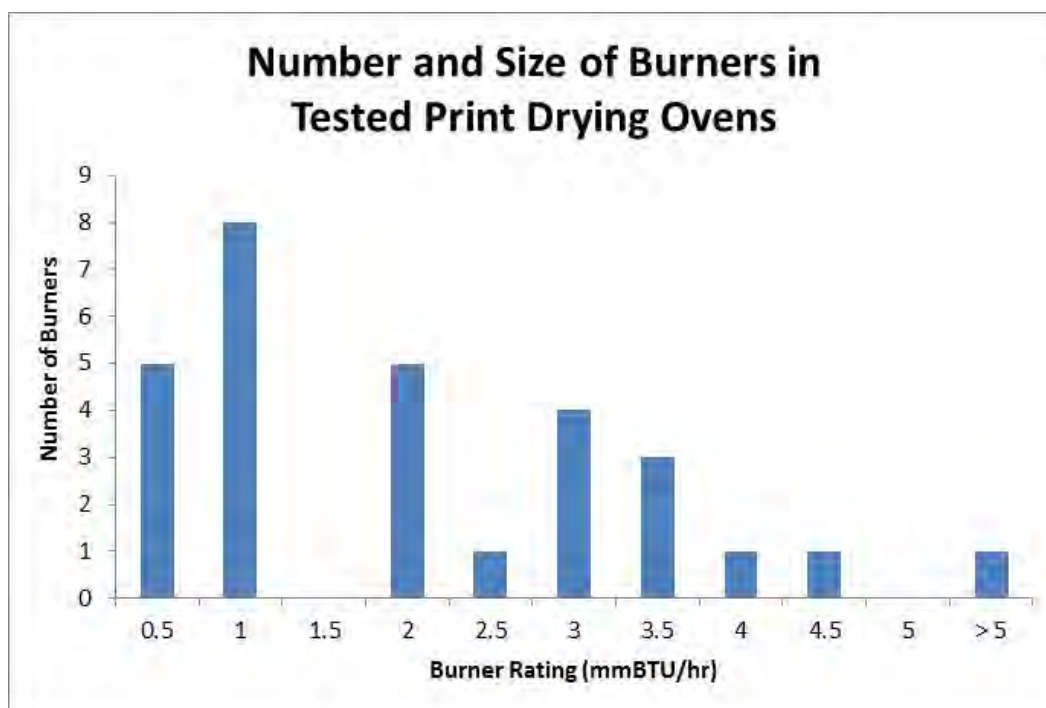
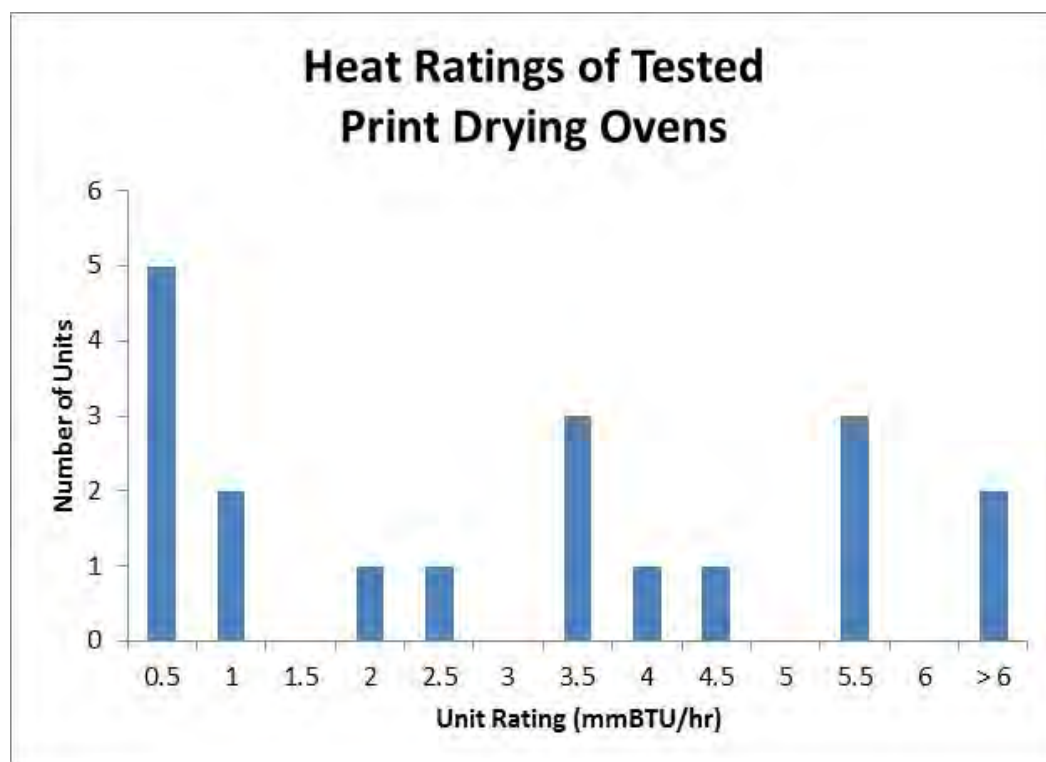


Figure M-4



Printing oven and dryer heat ratings vary from about 0.4 mmBtu/hour to 7.4 mmBtu/hour. The most common burner size in these ovens is also 1.0 mmBtu/hour. Textile tenter dryers

typically have eight or nine burners that are rated less than 1.0 mmBtu/hour. The other type of textile dryer typically has four burners each rated about 1.0 mmBtu/hour.

The emission test results for ovens and dryers indicate that all types of units tested comply with the Rule 1147 NO<sub>x</sub> emission limit. Table M-1 provides a summary of the completed Rule 1147 emission tests for ovens and dryers. At this time, 140 units used for a variety of processes have approved test results and comply with the 30 ppm NO<sub>x</sub> limit. The average emission concentration for most ovens and dryers is about 20 ppm NO<sub>x</sub>. The average emission concentration for textile dryers is about 25 ppm NO<sub>x</sub>. The range of emission concentrations for all ovens and dryers is from 4 ppm to 30 ppm. The range of emission concentrations for printing lines and ovens is 4 ppm to 29 ppm and for textile dryers is 14 ppm to 27 ppm. In addition, two ovens complied with the rule limit by averaging emissions from the oven and an afterburner that must comply with a NO<sub>x</sub> emission limit of 60 ppm.

Table M-1  
Rule 1147 Emissions Test Results for Ovens and Dryers

Equipment Category	Rule 1147 NO <sub>x</sub> Limit (ppm <sup>1</sup> )	Number of Units Tested at Normal/High Fire	Average NO <sub>x</sub> Concentration at Normal/High Fire (ppm)	Number of Units Tested at Low Fire	Average NO <sub>x</sub> Concentration at Low Fire (ppm)
Oven/Dryer	30 or 60 <sup>2</sup>	112	20	35	21
Print Dryer/Oven	30	19	20	4	23
Textile Shrink Dryer	30	2	24		
Textile Tenter Dryer	30	4	23	4	26
Unit Heater	30 or 60 <sup>2</sup>	3	20	1	13
<b>Number of Units</b>		140		44	

<sup>1</sup> The Rule 1147 NO<sub>x</sub> limit is based on a reference level of 3% oxygen (O<sub>2</sub>) in the exhaust. All emission test results are converted to a concentration in parts per million at the reference level of 3% O<sub>2</sub>.

<sup>2</sup> The emission limit depends upon the process temperature.

The results from the Rule 1147 emission testing program indicate that rule compliant technology is available for ovens and dryers from many sources. In addition, all of the types of ovens and dryers under permit in the SCAQMD can comply with the Rule 1147 NO<sub>x</sub> limit. However, there is a lower limit on the availability of low NO<sub>x</sub> burners for ovens and dryers. The smallest low NO<sub>x</sub> burners available are rated 0.4 and 0.5 mmBtu/hour (400,000 and 500,000 Btu/hour). Burners in this size are available from a number of manufacturers including Eclipse, Maxon, MidCo and PowerFlame. For lower firing rates, oven manufacturers will use this size of burner but limit the firing rate to less than the burner's maximum capacity. If these burners must regularly operate at less than 30% of the maximum firing rate, it may be difficult to comply with the NO<sub>x</sub> emission limit. Because there is a lower limit on the size of compliant burners for ovens and dryers, staff is considering an exemption from the Rule 1147 NO<sub>x</sub> emission limit for units with heat input capacities less than 325,000 Btu/hour.

## Appendix N – Food Ovens



## FOOD OVENS

Food ovens in use at the time SCAQMD Rule 1153.1 was adopted are no longer subject to Rule 1147. However, new food ovens are currently subject to Rule 1147 requirements. Staff are currently evaluating alternative rule development options for exempting new food ovens from Rule 1147. Although new food ovens may be exempt from Rule 1147 in the future, some operators of food ovens have reported results under the rule's emission testing program. At the time of this report, 13 food ovens used for a variety of baking and cooking operations have completed testing under the Rule 1147 program.

These ovens use burners from many manufacturers including Eclipse, Ensign/Selas, Flynn, Maxon and Weishaupt. Eclipse, Maxon and Weishaupt burners air heating burners are used in both batch and conveyor type convective ovens. Ensign and Flynn provide ribbon burners for heating specific types of conveyor ovens and some small batch ovens. For example, conveyor ovens with moving bands that must be heated in order to cook products on the band such as chips and crackers require ribbon or a similar type of burner. Batch type convective ovens can use a variety of burners and do not require ribbon burners. In addition, there are many conveyor type convective ovens that do not require or use ribbon burners. These convective batch and conveyor ovens use air heating nozzle mix or line burners.

Radiant infrared burners are used in both batch and conveyor ovens. This type of burner is available from many manufacturers including those identified earlier in this discussion. Three bakery ovens using only radiant infrared burners were tested and complied with Rule 1147 and Rule 1153.1 emission limits. This type of burner is used in both batch type and conveyor type ovens. The average NO<sub>x</sub> emission concentration for these burners is 13 ppm with a range of 6 to 19 ppm. Ovens with radiant infrared burners are exempt from the Rule 1153.1 requirement to perform an emissions test because these burners have NO<sub>x</sub> emissions significantly less than the emission limits in the rule (40 and 60 ppm NO<sub>x</sub>).

Four ovens with ribbon burners have been tested through the Rule 1147 emission testing program. Two baking ovens with operating temperatures less than 500 °F both had NO<sub>x</sub> emission concentrations of 21 ppm at their high or normal fire rate. One had NO<sub>x</sub> emission concentrations of 26 ppm at low fire. One of the units is used for baking tortillas and the other unit is used for baking breads and snacks. In addition, two griddle ovens used for making English muffins and other products cooked in griddles had emission concentrations of 41 ppm and 45 ppm. Griddle ovens with ribbon burners typically operate at temperatures above 500 °F. Both of these ovens comply with the Rule 1153.1 NO<sub>x</sub> emission limit of 60 ppm for this process temperature.

Five convection type ovens using nozzle mix air heating burners have been tested and comply with Rule 1147 and 1153.1 NO<sub>x</sub> emission limits. Two of the ovens are used to cook meat products and three cook breads and snacks. These ovens have average emission concentrations of 25 ppm NO<sub>x</sub> with a range of 22 ppm to 30 ppm. One of these units has a permit limit of 25 ppm NO<sub>x</sub> that was established prior to adoption of Rule 1147. This

oven has been operating for more than seven years with this permit condition and demonstrates that a 25 ppm NO<sub>x</sub> emission limit is achieved in practice for convection ovens.

The remaining oven that was tested is used for cooking meat and has two cooking sections. The first section is a charbroiler and the second is a convective heating section using steam and heated air. The heated air in the second section is produced using an Eclipse Air Heat line burner. The NO<sub>x</sub> emission concentration from all burners for this unit was 33 ppm. This result demonstrates compliance with Rule 1153.1 NO<sub>x</sub> emission limits of 40 ppm and 60 ppm. However, given the design and purpose of this unit, the first section of this device is exempt from the emission limits of Rules 1147 and Rule 1153.1 because it is a charbroiler. The exemption for charbroiling in both Rules 1147 and 1153.1 was not taken into account when the emission test protocol was prepared for this unit.

The results for the 13 food ovens tested through the Rule 1147 program indicate that every type of food oven and burner comply with Rule 1153.1 NO<sub>x</sub> emission limits. In addition, convection ovens using air heating burners, ovens with radiant infrared burners and conveyor type food ovens with ribbon burners operating at less than 500 °F also comply with the Rule 1147 NO<sub>x</sub> emission limit of 30 ppm. Moreover, another conveyor oven with ribbon burners and a process temperature less than 500 °F was tested prior to Rule 1147 adoption and had NO<sub>x</sub> emissions of less than 30 ppm (Figure B-5, Appendix B).

Currently, there are projects funded by SEMPRA Energy and the California Energy Commission to reduce NO<sub>x</sub> emissions from ribbon burners used in commercial and residential cooking ovens. The data from the Rule 1147 and Rule 1153.1 emissions testing programs and these technology projects will provide staff with data to determine how Rule 1147 and Rule 1153.1 should be amended in the future to limit NO<sub>x</sub> emissions from new food ovens.

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## **APPENDIX B**

### **RULE 1147 TASK FORCE MEETING HELD ON AUGUST 3, 2016**

**Appendix B, Attachment B-1**

**Agenda for Rule 1147 Task Force Meeting on August 3, 2016**

# Agenda

## Rule 1147 Task Force Meeting

10:30 a.m., August 3, 2016

Room CC-2

SCAQMD Headquarters, Diamond Bar, CA

- Introductions
- Background
  - Rule 1147 History, Implementation and Associated Activity
  - SCAQMD Commitments Including Technology Assessment
- Summary of SCAQMD's Draft Technology Assessment
- ETS, Inc. Presentation
- Stakeholder Input on Draft Technology Assessment
- Future Activity
- Project Contact

**Appendix B, Attachment B-2**

**Rule 1147 Task Force Meeting Presentation by SCAQMD Staff**

## Rule 1147 Task Force Meeting

August 3, 2016  
10:30 AM  
Conference Room CC-2  
SCAQMD Headquarters, Diamond Bar, CA

### Rule 1147 History

- Rule 1147 adopted December 2008 with a 10 year implementation schedule for existing equipment starting July 1, 2010
  - Units with NOx emissions > 1 pound/day phased in from July 1, 2010 to 2014 starting with equipment 25 years and older
  - Units with NOx emission ≤ 1 pound/day phased in 5 years later from July 1, 2015 to 2019 starting with equipment 30 years or older
- September 2010 amendment delayed compliance for the first two years of each category and removed requirement for timing or gas meter
  - Units with NOx emissions > 1 pound/day phased in from July 1, 2012 to 2014 starting with equipment 25 years and older
  - Units with NOx emission ≤ 1 pound/day phased in 5 years later (July 1, 2017 to 2019)
  - Included a requirement for a Technology Assessment of small and low use sources with NOx emissions ≤ 1 pound/day
- Amendment of Rules 219 & 222 for Construction & Portable Equipment
- Adoption of Rule 1153.1 for Food Ovens

### Purpose

- Introduce the Contractor Reviewing the SCAQMD Technology Assessment -- ETS, Inc.
- Receive Input from Stakeholders on SCAQMD's Draft Technology Assessment
- Discuss Future Activities and Schedule

### Commitments from September 2010 Rule Amendment

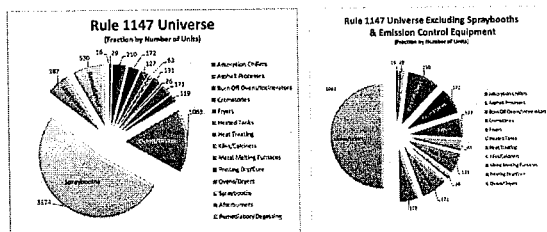
- September 2010 Rule Amendment Includes a Requirement to Perform a Technology Assessment of Small and Low Emission Sources (≤ 1 pound/day NOx)
- Board Resolution to Fund Technology Development if Low NOx Burners Not Available for Small Sources
- EO Commitment to 3rd Party Review of SCAQMD's Technology Assessment

### Background

### SCAQMD's Draft Technology Assessment



## Future Activities and Schedule



## Future Activities and Schedule

## Future Activities and Schedule

- Summarize ETS Findings and Recommendations
- Revise Draft Technology Assessment, if Needed
- Report to SSC – October 2016
- Initiate Rule Development – October 2016
- Rule Amendment – Spring 2017

## Future Activities and Schedule

- **Technical Feasibility**
  - The smallest low NOx burners available for low temperature sources are 400,000 to 500,000 Btu/hour
  - Retrofitting heated process tanks that do not comply with the NOx limit requires replacement of the whole system
  - A 30 ppm emission limit for the primary chamber of multi-chamber incinerators, burn-off ovens, burn-out furnaces and incinerators is not possible with the available burners
- **Cost Effectiveness**
  - Replacing heating systems on existing in-use spray booths to meet the NOx emission limit may result in a cost effectiveness higher than SCAQMD criteria used for minor sources
  - Retrofitting units with daily emissions of 1 pound/day or less to meet the NOx limit may result in a cost effectiveness higher than SCAQMD criteria used for minor sources

- Summarize ETS Findings and Recommendations
- Revise Draft Technology Assessment, if Needed
- Report to SSC – October 2016
- Initiate Rule Development – October 2016
- Rule Amendment – Spring 2017

Rule 1147 Contact

Wayne Barcikowski

[wbarcikowski@aqmd.gov](mailto:wbarcikowski@aqmd.gov)

909-396-3077

SCAQMD  
21865 Copley Dr.  
Diamond Bar, CA 91765

## Rule 1147 Contact

Wayne Barcikowski

wbarcikowski@aqmd.gov

909-396-3077

SCAQMD  
21865 Copley Dr.  
Diamond Bar, CA 91765

**Appendix B, Attachment B-3**

**Rule 1147 Task Force Meeting Presentation by ETS, Inc.**

# Rule 1147

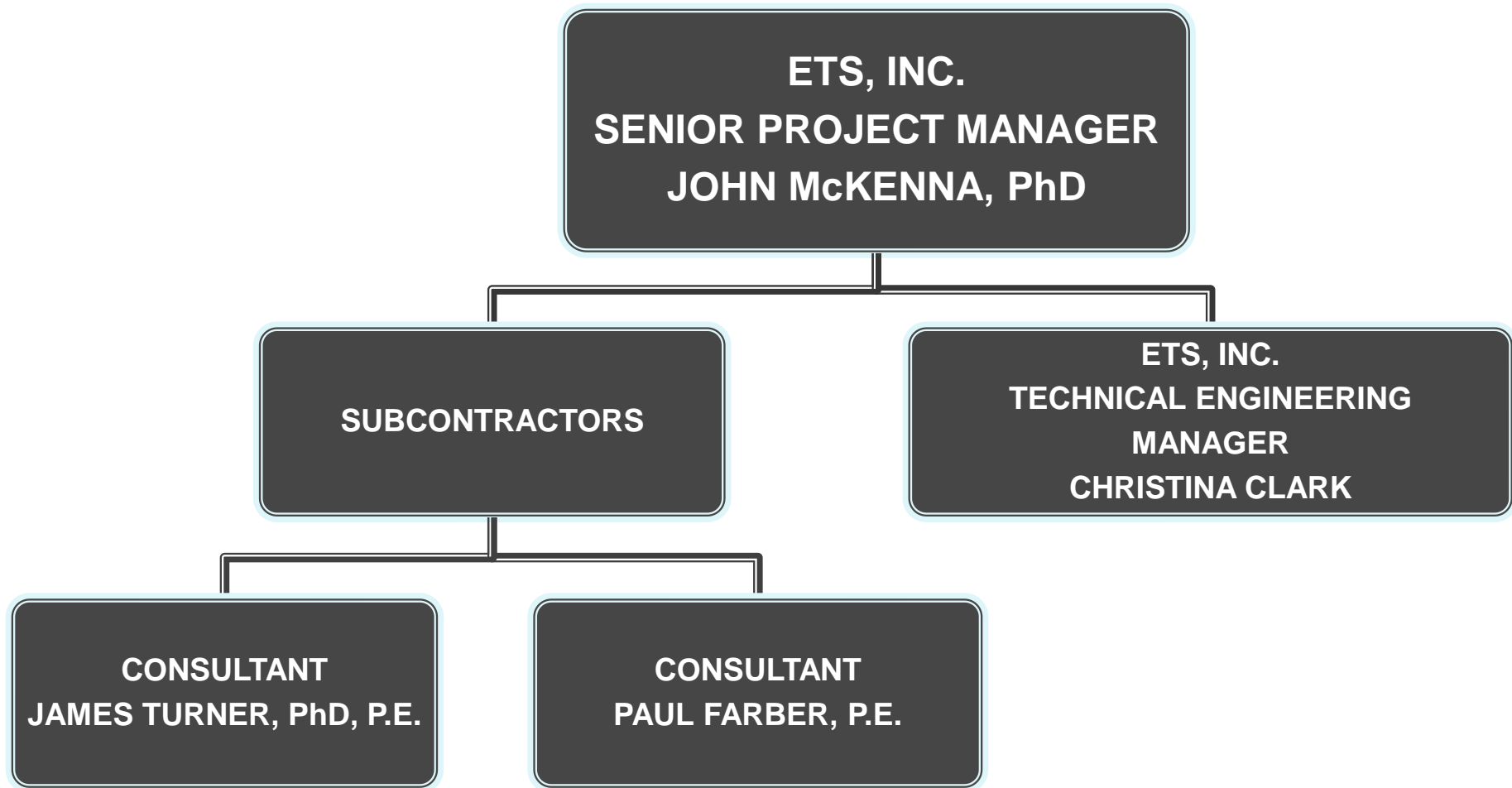
## Task Force Meeting

Independent Third Party Review of  
Draft Rule 1147 Technology Assessment  
for Small and Low Emission Sources  
By ETS, Inc.



August 3, 2016  
SCAQMD Headquarters

# Project Organization Chart



# Information Reviewed by ETS to Date

- ▶ SCAQMD *Rule 1147 – NO<sub>x</sub> Reductions from Miscellaneous Sources* (September 2011)
- ▶ SCAQMD *Draft Technology Assessment for Rule 1147 Small and Low Emission Sources* (February 2016)
- ▶ SCAQMD *Best Available Control Technology Guidelines (May 2016 Draft)*

# Information Reviewed by ETS to Date

- ▶ Confidential Information Received:
  - SCAQMD Source Test Databases as of January 2015
  - Summary of Low and High Temp Burner Costs
  - Spray Booth Costs
  - Immersion Tube Heating and Metal Melt Furnace Calculations
  - Contacts for Low NO<sub>x</sub> Burner Manufacturers



# Assumptions Made by ETS in Review

- ▶ Annual average NOx emissions by equipment category utilized in cost effectiveness calculations are representative
- ▶ Cost effectiveness calculations in the Draft Technology Assessment include total capital investment costs (i.e., price of the equipment, cost for shipping, engineering and installation) per burner
  - Total annual costs are assumed to be not applicable
  - Routine maintenance & equipment costs unrelated to control equipment excluded
  - Compliance demonstration costs are excluded
  - Costs due to compliance with other rules are excluded

# Stakeholder Input on Rule 1147 Changes Under Consideration (1)

## Exempt sources with total rated heat input less than 325,000 Btu/hour from the Rule 1147 NOx emission limit

- There are no burners in this size range for ovens and dryers that are designed to meet BACT and Rule 1147 emission limits
- The smallest low NOx air heating burners designed to comply with the 30 ppm NOx limit are 400,000 to 500,000 Btu/hour
- If this size burner is set up to operate at  $< 325,000$  Btu/hour and used in oven that requires burner to frequently operate at heat inputs  $< 30\%$  of capacity, then burner not likely to comply with 30 ppm emission limit
- Burners available in this size range for high temp. equipment; however, these applications (heat treating furnaces & kilns) typically use multiple small burners, total heat ratings  $> 325,000$  Btu/hour, and must comply with emission limit of 60 ppm
- Change would affect unknown # of small units regulated by Rule 1147





# Stakeholder Input on Rule 1147 Changes Under Consideration (2)

**Delay compliance for existing in-use heated process tanks, evaporators and parts washers from the NOx emission limit until such time the combustion system or tank is modified, replaced or relocated**

- New units would be required to meet the emission limit unless the total unit heat rating is less than or equal to 325,000 Btu/hour
- Source test information on three of the four available types of heating systems for these heated process tanks can comply with the emission limits; however, if a unit does not comply with the emission limit, the entire process tank must be replaced
- Staff estimates this change would affect less than 50 units subject to the Rule 1147 NOx emission limit

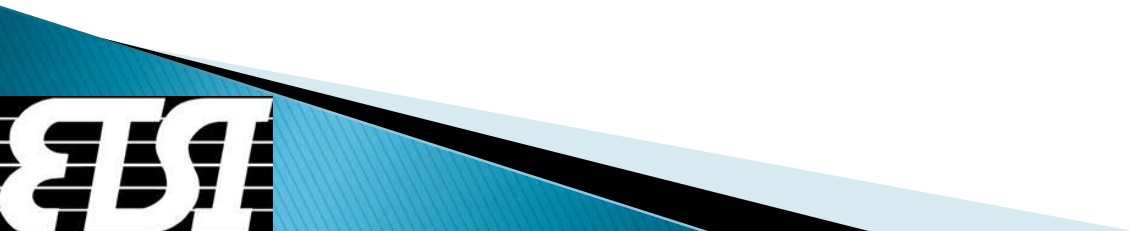


# Stakeholder Input on Rule 1147

## Changes Under Consideration (3)

**Change the NOx emission limit from 30 ppm to 60 ppm NOx for the primary chamber of multi-chamber incinerators, burn-off ovens, burn-out furnaces and incinerators that operate below 800°F**

- This new limit will be the same compliance limit required for higher temperatures
- The burner needed for the primary chamber of these devices is not designed to achieve 30 ppm
- This change would affect a small unknown number of units



# Stakeholder Input on Rule 1147 Changes Under Consideration (4)

**Delay compliance with the NOx emission limit for existing in-use spray booths until the heating system is modified, relocated**

- Modified, relocated and new spray booths & prep stations would be required to meet emission limit at time of modification or installation unless the total unit heat rating is  $\leq 325,000$  Btu/hour; however, Staff is considering to evaluate existing in-use operations with multiple booths and locations separately from smaller operations with one location and single booths and prep stations.
- Cost effectiveness for a new unit that meets Rule 1147 NOx emission limit is at most \$22,000 per ton. The cost effectiveness for retrofitting an existing unit can be as high as \$88,000 per ton.
- Change will affect  $> 50\%$  of units now subject to Rule 1147 emission limits
- Will result in delays in emission reductions of 0.3 to 0.4 tons/day starting July 1, 2017. These emission reductions forgone will be reduced as new units replace old units.

# Stakeholder Input on Rule 1147 Changes Under Consideration (5)

**Delay compliance with NOx emission limit for existing in-use units with actual NOx emissions of one pound per day or less until the combustion system is modified, relocated or replaced**

- Staff considering to further evaluate operations with multiple small units whose emissions are significant. Unit emissions can be documented using gas or time meters and daily recordkeeping.
- Cost effectiveness for retrofitting low emission units varies considerably and can be significantly higher than the SCAQMD BACT Guidelines average cost effectiveness criteria for equipment for which BACT has not been defined.
- Change will affect at least one quarter of in-use units subject to Rule 1147 emission limit
- Will result in delays of emission reductions of about 0.3 to 0.5 tons/day starting on July 1, 2017. These forgone reductions will decrease as new units replace old units.



# Stakeholder Input on Rule 1147 Changes

THANK YOU FOR THE INPUTS



**Appendix B, Attachment B-4**  
**Rule 1147 Task Force Meeting Sign-in Sheet**



South Coast  
AQMD

## R. 1147 Task Force

Wednesday August 3, 2016- 10:30 AM (PT)

SCAQMD Headquarters | 21865 East Copley Drive, Diamond Bar, CA 91765 | Conference Room CC2

PLEASE PRINT LEGIBLY | SIGN-IN SHEETS MAY BE USED TO NOTIFY YOU OF FUTURE RULE RELATED WORKING-GROUPS AND HEARINGS

SIGN-IN SHEETS MAY BECOME PUBLIC RECORD | SIGNING-IN IS VOLUNTARY

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John McKenna	ETS, Inc.	" "	540-265-0004 x293	jnmck@etsi-inc.com

**Appendix B, Attachment B-5**

**Business Cards Provided to SCAQMD at Rule 1147 Task Force Meeting**





**South Coast  
AQMD**

## R. 1147 Task Force

Wednesday August 3, 2016- 10:30 AM (PT)

SCAQMD Headquarters | 21865 East Copley Drive, Diamond Bar, CA 91765 | Conference Room CC2

PLEASE PRINT LEGIBLY | SIGN-IN SHEETS MAY BE USED TO NOTIFY YOU OF FUTURE RULE RELATED WORKING-GROUPS AND HEARINGS  
SIGN-IN SHEETS MAY BECOME PUBLIC RECORD | SIGNING-IN IS VOLUNTARY

Name:	Organization:	Address (including zip code)	Phone Number:	Email:
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**South Coast  
AQMD**

www.aqmd.gov

South Coast  
Air Quality Management District



**MARK ABRAMOWITZ** ✓  
Board Consultant to Dr. Joseph K. Lyou  
Governing Board Member  
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**Appendix B, Attachment B-6**

**Business Cards Provided to ETS, Inc. at Rule 1147 Task Force Meeting**



Anthony W. Endres  
President

***Furnace Dynamics, Inc.***

Innovative Consulting And Furnace Designs For Industry

261 Euclid Avenue Long Beach, CA 90803  
Ph. 562-433-3025 Cell 562-480-8833 Fax 562-433-9282  
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Executive Director

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Cell: 213-247-0664

## **APPENDIX C**

### **INFORMATION RECEIVED FROM FURNACE DYNAMICS, INC. AT RULE 1147 TASK FORCE MEETING ON AUGUST 3, 2016**

## SUMMARY OF INFORMATION RECEIVED FROM FURNACE DYNAMICS, INC. AT RULE 1147 TASK FORCE MEETING

ITEM #	DESCRIPTION OF INFORMATION RECEIVED BY ETS	NAME/TITLE	COMPANY	ADDITIONAL RELEVANT INFORMATION	DATE RECEIVED BY ETS	FOLLOW-UP BY ETS
<i>Information Received at Rule 1147 Task Force Meeting on 08/03/16 at SCAQMD Headquarters:</i>						
1	Letter titled "A discussion on Potential to Emit (PTE)" with no specific addressee and dated 11/19/15	Anthony Endres, President	Furnace Dynamics, Inc.	Includes a series of charts with relationship of daily emissions vs. BTU input vs. hours of operation at a variety of different average firing rates.	08/03/16	ETS response in Section VIII.A of ETS Independent Technical Review Document
2	Letter titled "RE. Items of Concern Technology Assessment" addressed to Joe Cassmassi, Sr. Rules Manager, SCAQMD, dated 02/18/16	Anthony Endres, President	Furnace Dynamics, Inc.	Cursory review of the SCAQMD Rule 1147 Draft Technology Assessment	08/03/16	ETS response in Section VIII.B of ETS Independent Technical Review Document
3	One page sheet titled "SCAQMD Minor Source BACT Cost Effectiveness Calculation" - Type of Project: Smokehouse AB	Anthony Endres, President	Furnace Dynamics, Inc.		08/03/16	ETS response in Section VIII.C of ETS Independent Technical Review Document
4	One page sheet titled "SCAQMD Minor Source BACT Cost Effectiveness Calculation" - Type of Project: Afterburner	Anthony Endres, President	Furnace Dynamics, Inc.		08/03/16	ETS response in Section VIII.D of ETS Independent Technical Review Document

**Appendix C, Attachment C-1**

**Stakeholder Item #1 – Furnace Dynamics, Inc.**

*Spoke at length, to Anthony Endres*



**FURNACE DYNAMICS, INC.**

261 Euclid Ave.  
Long Beach, CA 90803  
562-433-3025

November 19, 2015

### **A discussion on Potential to Emit (PTE)**

Potential to Emit is defined as the maximum amount of emissions that can be generated from a device operating at maximum capacity, 100% all of the time, twenty-four hours per day, seven days a week. On an annualized basis that number would be multiplied by 365 days per year. Whereas this is a relatively simplistic approach to determining emissions, it actually is impossible for devices to operate under these conditions. They can only operate under these conditions for relative short intervals when the equipment is first fired. The reason has to do with the fact that all of the devices in Rule 1147 are based on a defined operating temperature. This is true from forging, heat treating, metal melting, powder coating, crematories, cooking ovens, etc.

For example, I have designed combustion systems for over 120 furnaces in forging, heat treating and metal melting. Categorically, no device design is based on PTE. They are based on the objective for the process; the production throughput, operating temperatures, refractory losses, etc. It boils down to the net available heat to do work in the furnace or oven, after combustion losses balanced with the production of a given product.

On direct fired forge furnaces, the typical operating temperature range can be anywhere from 800F to as high as 2250°F and they can be in the same furnace. The theoretical flame temperature under optimal air fuel ratio conditions is between 3000°F and 3100°F. To put this into perspective, carbon steel in a molten state is cast at temperatures around 2900°F to 3050°F. Thus if operated in a typical high temperature furnace you could melt metal. Since the operating temperatures are dramatically less, the firing rate overall is consequently less. Since different alloys require tight control on operating temperatures, the heat input must be precisely maintained to not metallurgical destroy the parts contained in the furnaces. For instance, titanium is finish forged at 1750°F. If the temperature goes to 1825°F, the parts are scrap. It can thus be seen that it is impossible to operate at PTE without destroying parts. This goes for any operating range.

This is true regardless of the process albeit, in the metals industry, powder coating, burn off and a plethora of other processes covered in Rule 1147. They all provide heat input to match a specific set point temperature that are required to maintain the product quality necessary to satisfy customer needs. When looking at powder coating, the low NOx burners provide an operating temperature of between 300°F and 650°F, particular powder materials require tight temperature control. If that temperature is exceeded, the powder will be burnt, rendering the parts unusable. Due to the nature of oven burners and the necessity to achieve 30 ppm, the burners typically operate at higher amounts of excess air than high temperature operations. Even



***FURNACE DYNAMICS, INC.***

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562-433-3025

so, the actual flame temperatures can reach over 2000°F. Again, the PTE value would be incorrect to apply as a determinate consideration of emissions and thus pound per day emission profiles.

**Actual Annual Use vs. PTE:** To make the determination of actual vs. PTE, we acquired So. Cal Gas Company annual use in therms, converted them to millions of cubic feet, then got to total BTU/hr maximum input of each device in the plant and correlated the actual MMcf to the potential if operated at the maximum input, 24 hours per day on an annual basis. I conducted a study to determine the correlation of PTE to actual usage on two forge plants, one very large and a medium small shop. By the above method, the large forge facility was operating at a 25% of PTE. On the smaller facility there were gas consumption limits on all of their furnaces. The actuals were 19.6% of the permit limits which was well below the devices PTE. This facility was evaluated for actual annual vs. PTE and the results showed 10.82%. I have just completed an evaluation of a couple of powder coating companies. One had an actual annual, compared to PTE of 12%. Another powder coat facility showed a six-year average of 10.49%. during the six years the annual averages ranged from 9.16% to 11.99%. It is important to understand that these facilities were operating under normal production capabilities. Some companies are single shift, others are two shift and one is a three shift operation 5 days per week. I will be conducting additional analysis on a number of other facilities and forwarding those values to staff. However, I would believe the Actual compared to PTE is going to be in the 10% - 25% range.

**Included Charts:** I have included a series of charts that can provide a level of understanding of the relationship of daily emissions vs. BTU input vs. hours of operation at a variety of different average firing rates. The first charts are related to the SCAQMD default emission factor of 130#/MMcf natural gas or 101.4 ppm. The first chart shows the correlation of values assuming 100% of the capacity of the combustion system or PTE. The next three charts show the same correlations of firing rate to hours of operation at 50% of PTE and 20% of PTE. The fourth chart shows how high the BTU rating could be per hour of operation and still stay under 1#/day of NOx. The last three charts show the same data but based on a lower emission value of 60 ppm.

It can be seen the lower emission values reflect a substantially lower pound per day emission value. This is for illustrative value only. However, it should be understood that few devices operate anywhere near the default ppm values. In the last 3 years I have conducted approximately 175 pretests (mostly on 1147 devices) using a Testo 350 combustion analyzer. I have also parallel tested about 70 official source tests and my readings are typically less than 2 ppm deviation from the official source test results. I have yet to see any device that operated near the 101.4 ppm level. The lower temperature devices such as ovens are even lower relative to the default emission factor. Thus even with the values shown on the first 4 charts, the pound per day values are overstated.



***FURNACE DYNAMICS, INC.***

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I believe a collaborative effort on behalf of District staff and industry representatives can arrive at a reasonable means of determining what constitutes one pound per day usage. Perhaps the simplest approach could be the use of non-resettable timers on devices, with a limit of X hours per day for a given BTU input. Obviously this would have to be backed up with logs of hours of operation that could be verified by an inspector. If, as was suggested in the 1147 Task Force Meeting, an exemption (or an extended compliance date) be given to devices operating at less than a pound per day, verification is essential. There could be other means of quantification of daily emissions – these need to be discussed in a meaningful way to determine what works for the District and industry.

As always, we appreciate the opportunity to work with staff to assist in developing a bridge of understanding of how industry actually operates. Should you have any questions regarding this subject, please feel free to engage me in a meaningful dialogue to assist in developing rules that relate to real-world conditions.

Sincerely,

Anthony Endres  
President

# Determination of <1#/day NOx Emissions At Maximum Firing Rate

Average Input: 100%

ppm NOx: 101.4

Hours Per Day	Maximum BTU Input													
	200,000	250,000	300,000	350,000	400,000	450,000	500,000	550,000	600,000	800,000	900,000	1,000,000	1,500,000	2,000,000
1	0.025	0.031	0.037	0.043	0.050	0.056	0.062	0.068	0.074	0.099	0.111	0.124	0.186	0.248
2	0.050	0.062	0.074	0.087	0.099	0.111	0.124	0.136	0.149	0.198	0.223	0.248	0.371	0.495
3	0.074	0.093	0.111	0.130	0.149	0.167	0.186	0.204	0.223	0.297	0.334	0.371	0.557	0.743
4	0.099	0.124	0.149	0.173	0.198	0.223	0.248	0.272	0.297	0.396	0.446	0.495	0.743	0.990
5	0.124	0.155	0.186	0.217	0.248	0.279	0.310	0.340	0.371	0.495	0.557	0.619	0.929	1.238
6	0.149	0.186	0.223	0.260	0.297	0.334	0.371	0.409	0.446	0.594	0.669	0.743	1.114	1.486
7	0.173	0.217	0.260	0.303	0.347	0.390	0.433	0.477	0.520	0.693	0.780	0.867	1.300	1.733
8	0.198	0.248	0.297	0.347	0.396	0.446	0.495	0.545	0.594	0.792	0.891	0.990	1.486	1.981
9	0.223	0.279	0.334	0.390	0.446	0.501	0.557	0.613	0.669	0.891	1.003	1.114	1.671	2.229
10	0.248	0.310	0.371	0.433	0.495	0.557	0.619	0.681	0.743	0.990	1.114	1.238	1.857	2.476
11	0.272	0.340	0.409	0.477	0.545	0.613	0.681	0.749	0.817	1.090	1.226	1.362	2.043	2.724
12	0.297	0.371	0.446	0.520	0.594	0.669	0.743	0.817	0.891	1.189	1.337	1.486	2.229	2.971
13	0.322	0.402	0.483	0.563	0.644	0.724	0.805	0.885	0.966	1.288	1.449	1.610	2.414	3.219
14	0.347	0.433	0.520	0.607	0.693	0.780	0.867	0.953	1.040	1.387	1.560	1.733	2.600	3.467
15	0.371	0.464	0.557	0.650	0.743	0.836	0.929	1.021	1.114	1.486	1.671	1.857	2.786	3.714
16	0.396	0.495	0.594	0.693	0.792	0.891	0.990	1.090	1.189	1.585	1.783	1.981	2.971	3.962
17	0.421	0.526	0.631	0.737	0.842	0.947	1.052	1.158	1.263	1.684	1.894	2.105	3.157	4.210
18	0.446	0.557	0.669	0.780	0.891	1.003	1.114	1.226	1.337	1.783	2.006	2.229	3.343	4.457
19	0.470	0.588	0.706	0.823	0.941	1.059	1.176	1.294	1.411	1.882	2.117	2.352	3.529	4.705
20	0.495	0.619	0.743	0.867	0.990	1.114	1.238	1.362	1.486	1.981	2.229	2.476	3.714	4.952
21	0.520	0.650	0.780	0.910	1.040	1.170	1.300	1.430	1.560	2.080	2.340	2.600	3.900	5.200
22	0.545	0.681	0.817	0.953	1.090	1.226	1.362	1.498	1.634	2.179	2.451	2.724	4.086	5.448
23	0.570	0.712	0.854	0.997	1.139	1.281	1.424	1.566	1.709	2.278	2.563	2.848	4.271	5.695
24	0.594	0.743	0.891	1.040	1.189	1.337	1.486	1.634	1.783	2.377	2.674	2.971	4.457	5.943

- Notes:
1. BTU/CF = 1050
  2. Emissions are based on the SCAQMD default value of 130#/MMCF or 101.4 ppm
  3. All emissions are pound per day based on the hours per day operated.
  4. Shaded areas indicate the operational values that exceed one pound per day
  5. Formula is (BTU/1050) x pounds per million cubic feet/1,000,000 x hours of operation

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# Determination of <1#/day NOx Emissions At Less Than 100% Firing Rate

Average Input: 50%

ppm NOx: 101.4

Hours Per Day	Maximum BTU Input													
	200,000	250,000	300,000	350,000	400,000	450,000	500,000	550,000	600,000	800,000	900,000	1,000,000	1,500,000	2,000,000
1	0.012	0.015	0.019	0.022	0.025	0.028	0.031	0.034	0.037	0.050	0.056	0.062	0.093	0.124
2	0.025	0.031	0.037	0.043	0.050	0.056	0.062	0.068	0.074	0.099	0.111	0.124	0.186	0.248
3	0.037	0.046	0.056	0.065	0.074	0.084	0.093	0.102	0.111	0.149	0.167	0.186	0.279	0.371
4	0.050	0.062	0.074	0.087	0.099	0.111	0.124	0.136	0.149	0.198	0.223	0.248	0.371	0.495
5	0.062	0.077	0.093	0.108	0.124	0.139	0.155	0.170	0.186	0.248	0.279	0.310	0.464	0.619
6	0.074	0.093	0.111	0.130	0.149	0.167	0.186	0.204	0.223	0.297	0.334	0.371	0.557	0.743
7	0.087	0.108	0.130	0.152	0.173	0.195	0.217	0.238	0.260	0.347	0.390	0.433	0.650	0.867
8	0.099	0.124	0.149	0.173	0.198	0.223	0.248	0.272	0.297	0.396	0.446	0.495	0.743	0.990
9	0.111	0.139	0.167	0.195	0.223	0.251	0.279	0.306	0.334	0.446	0.501	0.557	0.836	1.114
10	0.124	0.155	0.186	0.217	0.248	0.279	0.310	0.340	0.371	0.495	0.557	0.619	0.929	1.238
11	0.136	0.170	0.204	0.238	0.272	0.306	0.340	0.375	0.409	0.545	0.613	0.681	1.021	1.362
12	0.149	0.186	0.223	0.260	0.297	0.334	0.371	0.409	0.446	0.594	0.669	0.743	1.114	1.486
13	0.161	0.201	0.241	0.282	0.322	0.362	0.402	0.443	0.483	0.644	0.724	0.805	1.207	1.610
14	0.173	0.217	0.260	0.303	0.347	0.390	0.433	0.477	0.520	0.693	0.780	0.867	1.300	1.733
15	0.186	0.232	0.279	0.325	0.371	0.418	0.464	0.511	0.557	0.743	0.836	0.929	1.393	1.857
16	0.198	0.248	0.297	0.347	0.396	0.446	0.495	0.545	0.594	0.792	0.891	0.990	1.486	1.981
17	0.210	0.263	0.316	0.368	0.421	0.474	0.526	0.579	0.631	0.842	0.947	1.052	1.579	2.105
18	0.223	0.279	0.334	0.390	0.446	0.501	0.557	0.613	0.669	0.891	1.003	1.114	1.671	2.229
19	0.235	0.294	0.353	0.412	0.470	0.529	0.588	0.647	0.706	0.941	1.059	1.176	1.764	2.352
20	0.248	0.310	0.371	0.433	0.495	0.557	0.619	0.681	0.743	0.990	1.114	1.238	1.857	2.476
21	0.260	0.325	0.390	0.455	0.520	0.585	0.650	0.715	0.780	1.040	1.170	1.300	1.950	2.600
22	0.272	0.340	0.409	0.477	0.545	0.613	0.681	0.749	0.817	1.090	1.226	1.362	2.043	2.724
23	0.285	0.356	0.427	0.498	0.570	0.641	0.712	0.783	0.854	1.139	1.281	1.424	2.136	2.848
24	0.297	0.371	0.446	0.520	0.594	0.669	0.743	0.817	0.891	1.189	1.337	1.486	2.229	2.971

- Notes:
1. BTU/CF = 1050
  2. Emissions are based on the SCAQMD default value of 130#/MMCF or 101.4 ppm
  3. All emissions are pound per day based on the hours per day operated.
  4. Shaded areas indicate the operational values that exceed one pound per day
  5. Formula is (BTU/1050) x pounds per million cubic feet /1,000,000 x hours of operation x percent of maximum firing rate

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# Determination of <1#/day NOx Emissions At Less Than 100% Firing Rate

Average Input: 20%

ppm NOx: 101.4

Hours Per Day	Maximum BTU Input													
	200,000	250,000	300,000	350,000	400,000	450,000	500,000	550,000	600,000	800,000	900,000	1,000,000	1,500,000	2,000,000
1	0.005	0.006	0.007	0.009	0.010	0.011	0.012	0.014	0.015	0.020	0.022	0.025	0.037	0.050
2	0.010	0.012	0.015	0.017	0.020	0.022	0.025	0.027	0.030	0.040	0.045	0.050	0.074	0.099
3	0.015	0.019	0.022	0.026	0.030	0.033	0.037	0.041	0.045	0.059	0.067	0.074	0.111	0.149
4	0.020	0.025	0.030	0.035	0.040	0.045	0.050	0.054	0.059	0.079	0.089	0.099	0.149	0.198
5	0.025	0.031	0.037	0.043	0.050	0.056	0.062	0.068	0.074	0.099	0.111	0.124	0.186	0.248
6	0.030	0.037	0.045	0.052	0.059	0.067	0.074	0.082	0.089	0.119	0.134	0.149	0.223	0.297
7	0.035	0.043	0.052	0.061	0.069	0.078	0.087	0.095	0.104	0.139	0.156	0.173	0.260	0.347
8	0.040	0.050	0.059	0.069	0.079	0.089	0.099	0.109	0.119	0.158	0.178	0.198	0.297	0.396
9	0.045	0.056	0.067	0.078	0.089	0.100	0.111	0.123	0.134	0.178	0.201	0.223	0.334	0.446
10	0.050	0.062	0.074	0.087	0.099	0.111	0.124	0.136	0.149	0.198	0.223	0.248	0.371	0.495
11	0.054	0.068	0.082	0.095	0.109	0.123	0.136	0.150	0.163	0.218	0.245	0.272	0.409	0.545
12	0.059	0.074	0.089	0.104	0.119	0.134	0.149	0.163	0.178	0.238	0.267	0.297	0.446	0.594
13	0.064	0.080	0.097	0.113	0.129	0.145	0.161	0.177	0.193	0.258	0.290	0.322	0.483	0.644
14	0.069	0.087	0.104	0.121	0.139	0.156	0.173	0.191	0.208	0.277	0.312	0.347	0.520	0.693
15	0.074	0.093	0.111	0.130	0.149	0.167	0.186	0.204	0.223	0.297	0.334	0.371	0.557	0.743
16	0.079	0.099	0.119	0.139	0.158	0.178	0.198	0.218	0.238	0.317	0.357	0.396	0.594	0.792
17	0.084	0.105	0.126	0.147	0.168	0.189	0.210	0.232	0.253	0.337	0.379	0.421	0.631	0.842
18	0.089	0.111	0.134	0.156	0.178	0.201	0.223	0.245	0.267	0.357	0.401	0.446	0.669	0.891
19	0.094	0.118	0.141	0.165	0.188	0.212	0.235	0.259	0.282	0.376	0.423	0.470	0.706	0.941
20	0.099	0.124	0.149	0.173	0.198	0.223	0.248	0.272	0.297	0.396	0.446	0.495	0.743	0.990
21	0.104	0.130	0.156	0.182	0.208	0.234	0.260	0.286	0.312	0.416	0.468	0.520	0.780	1.040
22	0.109	0.136	0.163	0.191	0.218	0.245	0.272	0.300	0.327	0.436	0.490	0.545	0.817	1.090
23	0.114	0.142	0.171	0.199	0.228	0.256	0.285	0.313	0.342	0.456	0.513	0.570	0.854	1.139
24	0.119	0.149	0.178	0.208	0.238	0.267	0.297	0.327	0.357	0.475	0.535	0.594	0.891	1.189

- Notes:
1. BTU/CF = 1050
  2. Emissions are based on the SCAQMD default value of 130#/MMCF or 101.4 ppm
  3. All emissions are pound per day based on the hours per day operated.
  4. Shaded areas indicate the operational values that exceed one pound per day
  5. Formula is (BTU/1050) x pounds per million cubic feet/1000000 x hours of operation x percent of maximum firing rate

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# Determination of <1#/day NOx Emissions At Less Than 100% Firing Rate

Average Input: 20%

ppm NOx: 101.4

Hours Per Day	Maximum BTU Input													
	1,000,000	1,200,000	1,400,000	1,600,000	1,800,000	2,000,000	2,200,000	2,400,000	2,600,000	2,800,000	3,000,000	3,200,000	3,400,000	3,600,000
1	0.025	0.030	0.035	0.040	0.045	0.050	0.054	0.059	0.064	0.069	0.074	0.079	0.084	0.089
2	0.050	0.059	0.069	0.079	0.089	0.099	0.109	0.119	0.129	0.139	0.149	0.158	0.168	0.178
3	0.074	0.089	0.104	0.119	0.134	0.149	0.163	0.178	0.193	0.208	0.223	0.238	0.253	0.267
4	0.099	0.119	0.139	0.158	0.178	0.198	0.218	0.238	0.258	0.277	0.297	0.317	0.337	0.357
5	0.124	0.149	0.173	0.198	0.223	0.248	0.272	0.297	0.322	0.347	0.371	0.396	0.421	0.446
6	0.149	0.178	0.208	0.238	0.267	0.297	0.327	0.357	0.386	0.416	0.446	0.475	0.505	0.535
7	0.173	0.208	0.243	0.277	0.312	0.347	0.381	0.416	0.451	0.485	0.520	0.555	0.589	0.624
8	0.198	0.238	0.277	0.317	0.357	0.396	0.436	0.475	0.515	0.555	0.594	0.634	0.674	0.713
9	0.223	0.267	0.312	0.357	0.401	0.446	0.490	0.535	0.579	0.624	0.669	0.713	0.758	0.802
10	0.248	0.297	0.347	0.396	0.446	0.495	0.545	0.594	0.644	0.693	0.743	0.792	0.842	0.891
11	0.272	0.327	0.381	0.436	0.490	0.545	0.599	0.654	0.708	0.763	0.817	0.872	0.926	0.981
12	0.297	0.357	0.416	0.475	0.535	0.594	0.654	0.713	0.773	0.832	0.891	0.951	1.010	1.070
13	0.322	0.386	0.451	0.515	0.579	0.644	0.708	0.773	0.837	0.901	0.966	1.030	1.094	1.159
14	0.347	0.416	0.485	0.555	0.624	0.693	0.763	0.832	0.901	0.971	1.040	1.109	1.179	1.248
15	0.371	0.446	0.520	0.594	0.669	0.743	0.817	0.891	0.966	1.040	1.114	1.189	1.263	1.337
16	0.396	0.475	0.555	0.634	0.713	0.792	0.872	0.951	1.030	1.109	1.189	1.268	1.347	1.426
17	0.421	0.505	0.589	0.674	0.758	0.842	0.926	1.010	1.094	1.179	1.263	1.347	1.431	1.515
18	0.446	0.535	0.624	0.713	0.802	0.891	0.981	1.070	1.159	1.248	1.337	1.426	1.515	1.605
19	0.470	0.565	0.659	0.753	0.847	0.941	1.035	1.129	1.223	1.317	1.411	1.506	1.600	1.694
20	0.495	0.594	0.693	0.792	0.891	0.990	1.090	1.189	1.288	1.387	1.486	1.585	1.684	1.783
21	0.520	0.624	0.728	0.832	0.936	1.040	1.144	1.248	1.352	1.456	1.560	1.664	1.768	1.872
22	0.545	0.654	0.763	0.872	0.981	1.090	1.198	1.307	1.416	1.525	1.634	1.743	1.852	1.961
23	0.570	0.683	0.797	0.911	1.025	1.139	1.253	1.367	1.481	1.595	1.709	1.822	1.936	2.050
24	0.594	0.713	0.832	0.951	1.070	1.189	1.307	1.426	1.545	1.664	1.783	1.902	2.021	2.139

- Notes:
1. BTU/CF = 1050
  2. Emissions are based on the SCAQMD default value of 130#/MMCF or 101.4 ppm
  3. All emissions are pound per day based on the hours per day operated.
  4. Shaded areas indicate the operational values that exceed one pound per day
  5. Formula is (BTU/1050) x pounds per million cubic feet/1000000 x hours of operation x percent of maximum firing rate

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# Determination of <1#/day NOx Emissions At Maximum Firing Rate

Average Input: 100%

NOx ppm: 60

Hours Per Day	Maximum BTU Input													
	200,000	250,000	300,000	350,000	400,000	450,000	500,000	550,000	600,000	800,000	900,000	1,000,000	1,500,000	2,000,000
1	0.011	0.014	0.017	0.020	0.023	0.026	0.029	0.031	0.034	0.046	0.051	0.057	0.086	0.114
2	0.023	0.029	0.034	0.040	0.046	0.051	0.057	0.063	0.069	0.091	0.103	0.114	0.171	0.229
3	0.034	0.043	0.051	0.060	0.069	0.077	0.086	0.094	0.103	0.137	0.154	0.171	0.257	0.343
4	0.046	0.057	0.069	0.080	0.091	0.103	0.114	0.126	0.137	0.183	0.206	0.229	0.343	0.457
5	0.057	0.071	0.086	0.100	0.114	0.129	0.143	0.157	0.171	0.229	0.257	0.286	0.429	0.571
6	0.069	0.086	0.103	0.120	0.137	0.154	0.171	0.189	0.206	0.274	0.309	0.343	0.514	0.686
7	0.080	0.100	0.120	0.140	0.160	0.180	0.200	0.220	0.240	0.320	0.360	0.400	0.600	0.800
8	0.091	0.114	0.137	0.160	0.183	0.206	0.229	0.251	0.274	0.366	0.411	0.457	0.686	0.914
9	0.103	0.129	0.154	0.180	0.206	0.231	0.257	0.283	0.309	0.411	0.463	0.514	0.771	1.029
10	0.114	0.143	0.171	0.200	0.229	0.257	0.286	0.314	0.343	0.457	0.514	0.571	0.857	1.143
11	0.126	0.157	0.189	0.220	0.251	0.283	0.314	0.346	0.377	0.503	0.566	0.629	0.943	1.257
12	0.137	0.171	0.206	0.240	0.274	0.309	0.343	0.377	0.411	0.549	0.617	0.686	1.029	1.371
13	0.149	0.186	0.223	0.260	0.297	0.334	0.371	0.409	0.446	0.594	0.669	0.743	1.114	1.486
14	0.160	0.200	0.240	0.280	0.320	0.360	0.400	0.440	0.480	0.640	0.720	0.800	1.200	1.600
15	0.171	0.214	0.257	0.300	0.343	0.386	0.429	0.471	0.514	0.686	0.771	0.857	1.286	1.714
16	0.183	0.229	0.274	0.320	0.366	0.411	0.457	0.503	0.549	0.731	0.823	0.914	1.371	1.829
17	0.194	0.243	0.291	0.340	0.389	0.437	0.486	0.534	0.583	0.777	0.874	0.971	1.457	1.943
18	0.206	0.257	0.309	0.360	0.411	0.463	0.514	0.566	0.617	0.823	0.926	1.029	1.543	2.057
19	0.217	0.271	0.326	0.380	0.434	0.489	0.543	0.597	0.651	0.869	0.977	1.086	1.629	2.171
20	0.229	0.286	0.343	0.400	0.457	0.514	0.571	0.629	0.686	0.914	1.029	1.143	1.714	2.286
21	0.240	0.300	0.360	0.420	0.480	0.540	0.600	0.660	0.720	0.960	1.080	1.200	1.800	2.400
22	0.251	0.314	0.377	0.440	0.503	0.566	0.629	0.691	0.754	1.006	1.131	1.257	1.886	2.514
23	0.263	0.329	0.394	0.460	0.526	0.591	0.657	0.723	0.789	1.051	1.183	1.314	1.971	2.629
24	0.274	0.343	0.411	0.480	0.549	0.617	0.686	0.754	0.823	1.097	1.234	1.371	2.057	2.743

- Notes:
1. BTU/CF = 1050
  2. Emissions are based on the "NOx ppm \_\_\_\_" value.
  3. All emissions are pound per day based on the hours per day operated.
  4. Shaded areas indicate the operational values that exceed one pound per day
  5. Formula is (BTU/1050) x pounds per million cubic feet/1,000,000 x hours of operation

Prepared by:  
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# Determination of <1#/day NOx Emissions At Less Than 100% Firing Rate

Average Input: 50%

NOx ppm: 60

Hours Per Day	Maximum BTU Input													
	200,000	250,000	300,000	350,000	400,000	450,000	500,000	550,000	600,000	800,000	900,000	1,000,000	1,500,000	2,000,000
1	0.006	0.007	0.009	0.010	0.011	0.013	0.014	0.016	0.017	0.023	0.026	0.029	0.043	0.057
2	0.011	0.014	0.017	0.020	0.023	0.026	0.029	0.031	0.034	0.046	0.051	0.057	0.086	0.114
3	0.017	0.021	0.026	0.030	0.034	0.039	0.043	0.047	0.051	0.069	0.077	0.086	0.129	0.171
4	0.023	0.029	0.034	0.040	0.046	0.051	0.057	0.063	0.069	0.091	0.103	0.114	0.171	0.229
5	0.029	0.036	0.043	0.050	0.057	0.064	0.071	0.079	0.086	0.114	0.129	0.143	0.214	0.286
6	0.034	0.043	0.051	0.060	0.069	0.077	0.086	0.094	0.103	0.137	0.154	0.171	0.257	0.343
7	0.040	0.050	0.060	0.070	0.080	0.090	0.100	0.110	0.120	0.160	0.180	0.200	0.300	0.400
8	0.046	0.057	0.069	0.080	0.091	0.103	0.114	0.126	0.137	0.183	0.206	0.229	0.343	0.457
9	0.051	0.064	0.077	0.090	0.103	0.116	0.129	0.141	0.154	0.206	0.231	0.257	0.386	0.514
10	0.057	0.071	0.086	0.100	0.114	0.129	0.143	0.157	0.171	0.229	0.257	0.286	0.429	0.571
11	0.063	0.079	0.094	0.110	0.126	0.141	0.157	0.173	0.189	0.251	0.283	0.314	0.471	0.629
12	0.069	0.086	0.103	0.120	0.137	0.154	0.171	0.189	0.206	0.274	0.309	0.343	0.514	0.686
13	0.074	0.093	0.111	0.130	0.149	0.167	0.186	0.204	0.223	0.297	0.334	0.371	0.557	0.743
14	0.080	0.100	0.120	0.140	0.160	0.180	0.200	0.220	0.240	0.320	0.360	0.400	0.600	0.800
15	0.086	0.107	0.129	0.150	0.171	0.193	0.214	0.236	0.257	0.343	0.386	0.429	0.643	0.857
16	0.091	0.114	0.137	0.160	0.183	0.206	0.229	0.251	0.274	0.366	0.411	0.457	0.686	0.914
17	0.097	0.121	0.146	0.170	0.194	0.219	0.243	0.267	0.291	0.389	0.437	0.486	0.729	0.971
18	0.103	0.129	0.154	0.180	0.206	0.231	0.257	0.283	0.309	0.411	0.463	0.514	0.771	1.029
19	0.109	0.136	0.163	0.190	0.217	0.244	0.271	0.299	0.326	0.434	0.489	0.543	0.814	1.086
20	0.114	0.143	0.171	0.200	0.229	0.257	0.286	0.314	0.343	0.457	0.514	0.571	0.857	1.143
21	0.120	0.150	0.180	0.210	0.240	0.270	0.300	0.330	0.360	0.480	0.540	0.600	0.900	1.200
22	0.126	0.157	0.189	0.220	0.251	0.283	0.314	0.346	0.377	0.503	0.566	0.629	0.943	1.257
23	0.131	0.164	0.197	0.230	0.263	0.296	0.329	0.361	0.394	0.526	0.591	0.657	0.986	1.314
24	0.137	0.171	0.206	0.240	0.274	0.309	0.343	0.377	0.411	0.549	0.617	0.686	1.029	1.371

- Notes:
1. BTU/CF = 1050
  2. Emissions are based on the SCAQMD default value of 130#/MMCF or 101.4 ppm
  3. All emissions are pound per day based on the hours per day operated.
  4. Shaded areas indicate the operational values that exceed one pound per day
  5. Formula is (BTU/1050) x pounds per million cubic feet /1,000,000 x hours of operation x percent of maximum firing rate

Prepared by:  
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# Determination of <1#/day NOx Emissions At Less Than 100% Firing Rate

Average Input: 20%

NOx ppm: 60

Hours Per Day	Maximum BTU Input													
	200,000	250,000	300,000	350,000	400,000	450,000	500,000	550,000	600,000	800,000	900,000	1,000,000	1,500,000	2,000,000
1	0.002	0.003	0.003	0.004	0.005	0.005	0.006	0.006	0.007	0.009	0.010	0.011	0.017	0.023
2	0.005	0.006	0.007	0.008	0.009	0.010	0.011	0.013	0.014	0.018	0.021	0.023	0.034	0.046
3	0.007	0.009	0.010	0.012	0.014	0.015	0.017	0.019	0.021	0.027	0.031	0.034	0.051	0.069
4	0.009	0.011	0.014	0.016	0.018	0.021	0.023	0.025	0.027	0.037	0.041	0.046	0.069	0.091
5	0.011	0.014	0.017	0.020	0.023	0.026	0.029	0.031	0.034	0.046	0.051	0.057	0.086	0.114
6	0.014	0.017	0.021	0.024	0.027	0.031	0.034	0.038	0.041	0.055	0.062	0.069	0.103	0.137
7	0.016	0.020	0.024	0.028	0.032	0.036	0.040	0.044	0.048	0.064	0.072	0.080	0.120	0.160
8	0.018	0.023	0.027	0.032	0.037	0.041	0.046	0.050	0.055	0.073	0.082	0.091	0.137	0.183
9	0.021	0.026	0.031	0.036	0.041	0.046	0.051	0.057	0.062	0.082	0.093	0.103	0.154	0.206
10	0.023	0.029	0.034	0.040	0.046	0.051	0.057	0.063	0.069	0.091	0.103	0.114	0.171	0.229
11	0.025	0.031	0.038	0.044	0.050	0.057	0.063	0.069	0.075	0.101	0.113	0.126	0.189	0.251
12	0.027	0.034	0.041	0.048	0.055	0.062	0.069	0.075	0.082	0.110	0.123	0.137	0.206	0.274
13	0.030	0.037	0.045	0.052	0.059	0.067	0.074	0.082	0.089	0.119	0.134	0.149	0.223	0.297
14	0.032	0.040	0.048	0.056	0.064	0.072	0.080	0.088	0.096	0.128	0.144	0.160	0.240	0.320
15	0.034	0.043	0.051	0.060	0.069	0.077	0.086	0.094	0.103	0.137	0.154	0.171	0.257	0.343
16	0.037	0.046	0.055	0.064	0.073	0.082	0.091	0.101	0.110	0.146	0.165	0.183	0.274	0.366
17	0.039	0.049	0.058	0.068	0.078	0.087	0.097	0.107	0.117	0.155	0.175	0.194	0.291	0.389
18	0.041	0.051	0.062	0.072	0.082	0.093	0.103	0.113	0.123	0.165	0.185	0.206	0.309	0.411
19	0.043	0.054	0.065	0.076	0.087	0.098	0.109	0.119	0.130	0.174	0.195	0.217	0.326	0.434
20	0.046	0.057	0.069	0.080	0.091	0.103	0.114	0.126	0.137	0.183	0.206	0.229	0.343	0.457
21	0.048	0.060	0.072	0.084	0.096	0.108	0.120	0.132	0.144	0.192	0.216	0.240	0.360	0.480
22	0.050	0.063	0.075	0.088	0.101	0.113	0.126	0.138	0.151	0.201	0.226	0.251	0.377	0.503
23	0.053	0.066	0.079	0.092	0.105	0.118	0.131	0.145	0.158	0.210	0.237	0.263	0.394	0.526
24	0.055	0.069	0.082	0.096	0.110	0.123	0.137	0.151	0.165	0.219	0.247	0.274	0.411	0.549

- Notes:
1. BTU/CF = 1050
  2. Emissions are based on the SCAQMD default value of 130#/MMCF or 101.4 ppm
  3. All emissions are pound per day based on the hours per day operated.
  4. Shaded areas indicate the operational values that exceed one pound per day
  5. Formula is (BTU/1050) x pounds per million cubic feet/1000000 x hours of operation x percent of maximum firing rate

Prepared by:  
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**Appendix C, Attachment C-2**

**Stakeholder Item #2 – Furnace Dynamics, Inc.**



**FURNACE DYNAMICS, INC.**

261 Euclid Ave.  
Long Beach, CA 90803  
562-433-3025

February 18, 2016

Mr. Joe Cassmassi  
Sr. Rules Manager  
South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765

RE. Items of Concern Technology Assessment

Dear Joe,

I have conducted a cursory review of the Draft Technology Assessment and have provided some comments below. Whereas, this is a significant document, more analysis is necessary. I believe this is a start toward a more complete review.

**Enforcement Considerations:**

1. Between July 2010 and the announcement that Rule 1147 was to be revised, there were a number of NOVs and NCs issued to permit holders. Once the rule revision was announced, all of the notices were rescinded through prosecutorial discretion authorized by the Executive Officer. Since we are at the same crossroads pursuant to the pending rule change and the pending rule change will render many of the existing NOVs null and void, it is requested that these existing NOVs be rescinded until after the final rule changes are made and approved by the Governing Board.
2. Delay any enforcement action until after the rule is modified so the notices will be appropriate to the new rule change.

**Cost Effectiveness**

1. **Excluded Costs.** There was an exclusion of replacement components in burner systems. Whereas, this is may be appropriate for boilers and other types of devices such as radiant tubes, the issue is with burner cans for low NOx recirculation type burners such as the Eclipse Winnox burners. These burners replaced non low NOx burners that did not have issues with burner cans. We

have found that these burner cans need to be replaced, usually in 3-10 years. Cost of the can is between \$2.5K – \$5K plus installation which can run a couple of thousands. The replacement requires two technicians to remove the burners from the oven, that includes disconnecting the electrical and plumbing from the burner, removing the old burner can, installing the new burner can, re installing the burner on the oven, reconnecting the electrical and plumbing then test firing. Therefore since this is not associated with a normal existing operation it needs to be included in the cost effectiveness considerations relating to maintenance costs.

2. **Evaluation of cost effectiveness methods.** Staff has indicted that the cost effectiveness was based on the differential between the cost of an existing burner vs. the cost of a new low NOx burner. This is not a valid consideration in that this is a replacement rule and would only apply to the very few cases where the existing burner was scheduled for replacement and not to the general population of equipment covered under 1147.
3. **Methods of Determining Cost Effectiveness.** The Technology Assessment cites a number of methods for determining the cost effectiveness of the devices contained within the rule structure. We believe this should be simplified so a single cost effective methodology is utilized for all 1147 devices. It is recommended that the 2006 SCAQMD Best Available Control Technology Guidelines, Part C: Policy and Procedures for Non-Major Polluting Facilities shown on Appendix D Attachment 1 – 4 be used.
4. **Maximum Acceptable Cost Effectiveness.** Since there are a significant number of devices in many different industries, there exists some significant differences in the actual cost effectiveness. Some devices have minimal use compared to other devices within the same category. These should be considered on a case by case basis. Consider that the RECLAIM Program must be reevaluated if the cost effectiveness exceeds \$25,000 per controlled ton. Yet there is no constraint as to the cost effectiveness of devices contained in Rule 1147. These are also small facilities with few clients compared to the large companies in the RECLAIM Program who, in many cases, like utilities have millions of customers and can easily distribute the cost of reduction to a point where the relative impact is inconsequential. We are therefore recommending a fixed maximum cost effectiveness level be established so it would be not disproportionately affect small industries. We would recommend an absolute value of \$30,000/controlled



ton. With the methodology for calculating contained in Appendix D Attachment 1-4.

**Burners Mentioned:**

1. We have had very good results with Eclipse Winnox burners for low temperature recirculation types of ovens. Another burner mentioned was a Maxon Cyclomax. Winnox burners have all passed source tests. When we pretested a Cyclomax burner, the NOx values at 100% were 25 ppm, as the set point was reached and the burner turned down, the NOx went up to around 95 ppm. The turndown on the burner was about 3:1. Thus, the burner had to be replaced even though the original Cyclomax burner was classified and purchased as a low NOx burner. One of the inherent problems with the new "low NOx" burners is the limited turndown to maintain emission values.
2. Whereas, there has been discussions of increased efficiency with the installation of new low NOx burners, the opposite can also be true due to the manufacturers having to use more excess air to lower flame temperatures and thus reduce NOx. If the existing burner is ratio fired and the new burner has to use 60 – 80% excess air to achieve the emission reductions, the total gas usage can actually increase. This becomes a problem if the existing burner is just marginally over the 1147 limit, the new burner that is installed can actually put more pollution into the air even with lower NOx values due to efficiency losses.
3. Other burners mentioned in the Technology Assessment (outside of the major manufacturers) are specific use burners and can only be used in very specific applications.

**PTE:**

4. Since PTE assumes maximum BTU input, 24 hours per day and no devices operate under those conditions, a better method of determination is necessary. A simple methodology by using reference charts and dialogue sent to staff for determining #/day is the most sensible approach.
5. The use of non-resettable timer for small units can satisfy this analysis
6. We evaluated a facility that operates 24/7 heating tanks with on/off temp control. Based on therms used to PTE they operate at about 15% PTE

***FURNACE DYNAMICS, INC.***

261 Euclid Ave.  
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7. Many other examples exist of actual use vs. PTE show a range of 10.49% - 25% of PTE

**Rule Compliance Date Issues**

1. Will the compliance dates be extended due to substantial rule changes?
2. If there is a 2016 compliance date for a device that will be effected by the rule change, can the proposed rule changes be applied?

**Mitigation Fee**

1. Extremely costly related to RTCs considering a typical RTC is going for about \$0.60/lb. The Mitigation fee of \$10.50/pound for a 3-year period, to be paid for by the permit holder is not comparable with other programs and after the fee is paid, the installation is still required which can significantly increase the cost of reduction. This issue should be taken up in the rule development phase of the modification to Rule 1147.
2. We need to explore another alternative method of offsetting emissions for low emitting sources. This again places a disproportionate economic burden on small business.
3. Consider a non-RECLAIM method of funding cost effective projects

We appreciate your consideration of the above and look forward working with staff in the ongoing efforts to address the considerable issues relating to Rule 1147.

Sincerely,

Anthony W. Endres  
President

**Appendix C, Attachment C-3**

**Stakeholder Item #3 – Furnace Dynamics, Inc.**

**SCAQMD MINOR SOURCE BACT  
COST EFFECTIVENESS CALCULATION**

**Type of Project**

**Smokehouse AB**

**Use**

Hours per Day	1.55
Days per Week	5
Weeks per Year	20
Annual Hours of Use	155 Hours
Gross Input BTU/hr	260,000 BTU/hr
Average Input (%)	100% % Input
Average BTU Input	260,000 BTU/hr
Starting Emissions	101.4 ppm
Pounds/MMCF	130.00 #/MMCF
Pounds per Hour	0.032
Pounds per Day	0.050
<b>Annual Emissions</b>	<b>4.99 # NOx/Year</b>

**Modified Source Emissions**

Average Input (%)	100% % Input
Average BTU Input	260,000
Starting Emissions	30 ppm
Pounds/MMCF	38.46 #/MMCF
Pounds per Hour	0.010
Pounds per Day	0.015
Annual Emissions	1 # NOx/Year

**Annual Reduced Emissions** **4 # NOx/year**

Annual Tons Reduced	0.002 T/Y Reduced
10 Year Emissions Reduction	0.018 Tons

**Equipment Costs**

Burners	\$ 30,000
Engineering	
Piping Costs	
Installation Costs	\$ 1,500
Refractory Cost	
Start Up Costs	
Gas Meter & Gages	\$ -
Permit to Construct Fee	\$ 2,200
Source Test Evaluation Fee	\$ 611
Source Test	\$ 3,000
<b>Equipment Cost</b>	<b>\$ 37,311</b>

**Annual Costs**

Periodic Maintenance	\$ 400 per year
Annual ST Fee	\$ 100 per year
Total Annual Cost	\$ 500
Cost 10 Year Cost	\$ 5,000
<b>Annual Cost (10 year average)</b>	<b>\$ 500</b>

**DCF Cost Per Ton Reduced** **\$ 2,354,801**

**Appendix C, Attachment C-4**

**Stakeholder Item #4 – Furnace Dynamics, Inc.**



**SCAQMD MINOR SOURCE BACT  
COST EFFECTIVENESS CALCULATION**

Type of Project	Afterburner
<b>Use</b>	
Hours per Day	9
Days per Week	0.9
Weeks per Year	50
Annual Hours of Use	405 Hours
Gross Input BTU/hr	5,000,000 BTU/hr
Average Input (%)	30% % Input
Average BTU Input	1,500,000 BTU/hr
Starting Emissions	101.4 ppm
Pounds/MMCF	130.00 #/MMCF
Pounds per Hour	0.186
Pounds per Day	1.671
<b>Annual Emissions</b>	<b>75 # NOx/Year</b>
<b>Modified Source Emissions</b>	
Average Input (%)	30% % Input
Average BTU Input	1,500,000
Starting Emissions	60 ppm
Pounds/MMCF	76.92 #/MMCF
Pounds per Hour	0.110
Pounds per Day	0.989
Annual Emissions	45 # NOx/Year
<b>Annual Reduced Emissions</b>	<b>31 # NOx/year</b>
Annual Tons Reduced	0.015 T/Y Reduced
10 Year Emissions Reduction	0.154 Tons
10 Year Emissions Reduction	307 Pounds
<b>Equipment Costs</b>	
Burners	\$ 110,000
Engineering	
Piping Costs	
Installation Costs	
Refractory Cost	
Start Up Costs	
Gas Meter & Gages	\$ 2,500
Permit to Construct Fee	
Source Test Evaluation Fee	\$ 611
Source Test	\$ 2,500
<b>Equipment Cost</b>	<b>\$ 115,611</b>
<b>Annual Costs</b>	
Periodic Maintenance	\$ 500 per year
Annual ST Fee	\$ 100 per year
Total Annual Cost	\$ 600
Cost 10 Year Cost	\$ 6,000
<b>Annual Cost (10 year average)</b>	<b>\$ 600</b>
<b>DCF Cost Per Ton Reduced</b>	<b>\$ 784,642</b>

## **APPENDIX D**

### **STAKEHOLDER COMMENTS RECEIVED SUBSEQUENT TO RULE 1147 TASK FORCE MEETING AND BY AUGUST 23, 2016 DEADLINE**

## SUMMARY OF INFORMATION RECEIVED FROM STAKEHOLDERS SUBSEQUENT TO RULE 1147 TASK FORCE MEETING

ITEM #	DESCRIPTION OF INFORMATION RECEIVED BY ETS	NAME/TITLE	COMPANY	ADDITIONAL RELEVANT INFORMATION	DATE RECEIVED BY ETS	FOLLOW-UP BY ETS
<b>Information Received Subsequent to Rule 1147 Task Force Meeting, But Prior to August 23, 2016 Deadline:</b>						
5	E-mail with subject line "Emailing: img083.pdf" and attachment file "img083.pdf" (3 pages). First page of attachment contained a product sheet on Titan Industrial Heating Systems Immersion Tube Gas Burners and the second & third pages contained emails between Stakeholders about the applicability of the burner in a wash tank.	Jim Waggoner, CEO	Industrial Process Equipment, Inc.		08/04/16	ETS response in Section VIII.E of ETS Independent Technical Review Document
6	E-mail with no subject line. Stated that an average burner replacement with a low nox burner is \$27,000 plus AQMD permits, source testing, any city permits, and down time costs being the line is shut down.	Jim Waggoner, CEO	Industrial Process Equipment, Inc.	Stated that it could be more money if they do not have enough gas pressure in the plant to service the new burner	08/04/16	ETS response in Section VIII.F of ETS Independent Technical Review Document
7	E-mail with attachment containing a letter titled "Re: SCAQMD Technical Assessment" (2 pages). Letter states concerns for SCAQMD Draft Technology Assessment of the "burner availability and feasibility to retrofit units". Second area of concern is regarding heated process tanks, evaporators and parts washers - "opinion that not only a good replacement burner does not exist to meet the required firing conditions for immersion heating, but a good immersion burner that will meet a <60 ppm NOx requirement for new units does not exist". Third area of concern is that "exempting existing units until the tank is modified or replaced encourages industry to continue to use old, outdated, in-efficient equipment as long as possible."	Allan Roughton, Sales Engineer	Wirth Gas Equipment, Inc.		08/18/16	ETS response in Section VIII.G of ETS Independent Technical Review Document
8	Packet of information received by mail with letter titled "Attention: Rule 1147" which describes why "the tube fired washer burners should be exempt along with other burners in this category or change the rule to 100 PPM". Information provided on the following burners: Eclipse ImmersoJet (IJ), Maxon Tube-O-Therm, Maxon XPO Immersion, Titan Immersion Heater. Comparison drawings of heated washer tanks with an Eclipse IJ6 burner tube arrangement and a Maxon XPO burner, including a washer BTU/hr burner sizing worksheet.	Jim Waggoner, CEO	Industrial Process Equipment, Inc.	Jim Waggoner states that he has been building spray washers for over 43 years. He also provided a "chart of companies that have shut down or moved out of California due to the costs of doing business in California".	08/23/16	ETS response in Section VIII.H of ETS Independent Technical Review Document

## SUMMARY OF INFORMATION RECEIVED FROM STAKEHOLDERS SUBSEQUENT TO RULE 1147 TASK FORCE MEETING

ITEM #	DESCRIPTION OF INFORMATION RECEIVED BY ETS	NAME/TITLE	COMPANY	ADDITIONAL RELEVANT INFORMATION	DATE RECEIVED BY ETS	FOLLOW-UP BY ETS
<b>Information Received Subsequent to Rule 1147 Task Force Meeting, But Prior to August 23, 2016 Deadline:</b>						
<b>9</b>	E-mail with subject line "Tech Assessment" and attachment file titled "Tech Assessment Complete.pdf" (16 pages). The file includes a write-up with regards to the SCAQMD Draft Technology Assessment, a comprehensive evaluation of a company that is now in compliance with the rule (Exhibits A through I), additional comments regarding a couple of other applications, and a cost effectiveness spreadsheet for an auto body spray booth (Exhibit J).	Anthony Endres, President	Furnace Dynamics, Inc.	Anthony Endres indicated that there was some financial information that should be maintained in a confidential basis, so Exhibits A - J were excluded from the ETS report.	08/23/16	08/26/16 - Email sent by ETS to Anthony Endres with an attachment letter containing a list of ETS clarifications & questions on the comprehensive evaluation presented in the "Tech Assessment Complete.pdf" file.
<b>Information Received After August 23, 2016 Deadline, But Continuation and Follow-up of Item #9:</b>						
<b>9a</b>	E-mail with subject line "Responses to your questions" and the following attachment files: 1) "Response to Christine Clark 1147 Letterhead.pdf" (8 pages), 2) "Burner Retrofit Info.pdf" (1 page), and 3) "Autobody Industry Summary.pdf" (2 pages). The files include responses to the ETS request for specific clarifications and answers to questions on the comprehensive evaluations presented in the Furnace Dynamics, Inc. "Tech Assessment Complete.pdf" file.	Anthony Endres, President	Furnace Dynamics, Inc.		08/31/16	09/01/16 - Email sent by ETS to Anthony Endres requesting a summary sheet from the source test results for a particular oven that was stated as being included in Item #9a. ETS could not find a source test summary sheet in the Item #9a files received.
<b>9b</b>	E-mail with subject line "Re: Responses to your questions" and an attachment file titled "ST Results Normal Firing all ovens.pdf" (7 pages). The attachment file contained source test summary sheets for 7 different ovens with the title sheet for each oven containing the words "Low Load".	Anthony Endres, President	Furnace Dynamics, Inc.		09/01/16	09/09/16 - Email sent by ETS to Anthony Endres requesting the <u>normal/high load</u> source test summary sheets corresponding to the <u>low load</u> sheets received for the 7 ovens in Item #9b.
<b>9c</b>	E-mail with subject line "ST High Load Data" and an attachment file titled "ST High Load.pdf" (8 pages). The attachment file contained source test summary sheets for 8 different ovens. The first 7 sheets had 7 different oven names as received in Item #9b with the title sheet for each oven containing the words "High Load". The 8th sheet was a different style of source test summary sheet for an 8th oven name.	Anthony Endres, President	Furnace Dynamics, Inc.		09/12/16	ETS response to Items #9, 9a, 9b, and 9c located in Section VIII.I of ETS Independent Technical Review Document

**Appendix D, Attachment D-1**

**Stakeholder Item #5 – Industrial Process Equipment, Inc.**



Industrial Heating Systems

Titan Industrial Heating Systems

[www.titanindustrialheating.com](http://www.titanindustrialheating.com)

Phone: (562) 951-9500 [info@titanindustrialheating.com](mailto:info@titanindustrialheating.com)

## Immersion Tube Gas Burners

Immersion tube type gas burner systems are commonly used on hot caustic, Alkaline, [Sodium dichromate](#), [black oxide](#) and hot seal tanks.

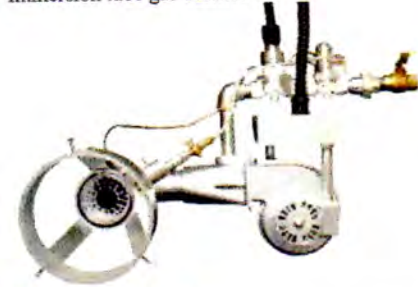
Use a Titan Industrial Heating Systems Gas Burner 4" or 6" and your heating problems are solved.

Please [contact us](#) for application assistance.



[Click to enlarge](#)

Immersion tube gas burners



[Click to enlarge](#)

450K Dual Immersion Tube Gas Burners for alkaline tank

Titan Industrial Heating Systems | 8323 Loch Lomond Drive | Pico Rivera, California 90660 USA  
Phone: 562.951.9500 | Fax: 562.436.2044 | Email: [info@titanindustrialheating.com](mailto:info@titanindustrialheating.com)

## Jim Waggoner

---

**From:** Anthony Endres <awefdi@gmail.com>  
**Sent:** Wednesday, August 03, 2016 3:37 PM  
**To:** Jim Waggoner  
**Subject:** Wayne's comments.

Jim,

\* I particularly like the comment using a bunch of the small burners and tubes to achieve the 50 ppm results. That would make an interesting wash tank and you would have fun with the tubes in the tank.

Tony

--

**FDI**

Innovative Consulting & Furnace Designs for Industry

Anthony Endres

President

Furnace Dynamics, Inc.

Phone: 562-433-3025

Fax: 562-433-9282

Cell: 562-480-8833

## Jim Waggoner

---

**From:** Allan Roughton <[allanr@wirthgasequipment.com](mailto:allanr@wirthgasequipment.com)>  
**Sent:** Thursday, August 04, 2016 9:47 AM  
**To:** Jim Waggoner  
**Subject:** RE: Emailing - html2ps.pdf

✖ Jim – Now that's a real throw back to the 1950's! Talk about 10 steps backwards with efficiency. If it's <2.0mm Btu/hr. and the process isn't regulated it doesn't need a permit in the first place. Another example of double talk from the district.

A

**From:** Jim Waggoner [mailto:[JimW@ipeontime.com](mailto:JimW@ipeontime.com)]  
**Sent:** Wednesday, August 03, 2016 2:10 PM  
**To:** Anthony Endres; Allan Roughton  
**Subject:** Fwd: Emailing - html2ps.pdf

Hi, this is Wayne's tube fired burners less than 60 ppm. No larger than 450,000 btu s Jim

Sent from my iPhone

Begin forwarded message:

**From:** "Wayne Barcikowski" <[wbarcikowski@aqmd.gov](mailto:wbarcikowski@aqmd.gov)>  
**To:** "Jim Waggoner" <[JimW@ipeontime.com](mailto:JimW@ipeontime.com)>  
**Subject:** Emailing - html2ps.pdf

Jim,

This is an information sheet on the immersion burner line that has been tested with results below 60 ppm.

Wayne



**Appendix D, Attachment D-2**

**Stakeholder Item #6 – Industrial Process Equipment, Inc.**

## Christina Clark

---

**From:** Jim Waggoner <JimW@ipeontime.com>  
**Sent:** Thursday, August 04, 2016 7:54 PM  
**To:** christinac@etsi-inc.com

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Hi Christina, an average burner replacement with a low nox burner is \$ 27,000 plus AQMD permits, Source testing and Down time costs being the line is shut down and any city permits. Could be more money if they do not have enough gas pressure in there plant to service the new burner.

Thank you

*Jim Waggoner*

CEO

Industrial Process Equipment, Inc.

1700 Industrial Ave, Norco, Ca. 92860

Ph (951) 808-9192 Ext 313 Fax (951) 808-9193 Cell (714) 984-4783

e-mail [jimw@ipeontime.com](mailto:jimw@ipeontime.com)

IPEwebsite links: [WWW.IPEONTIME.COM](http://WWW.IPEONTIME.COM)

Lasernut profile video: <http://www.youtube.com/watch?v=YN75vyjMVNM>

Lasernut website: [www.lasernut.com](http://www.lasernut.com)

**"We Fabricate Your Future"**

**Appendix D, Attachment D-3**

**Stakeholder Item #7 – Wirth Gas Equipment, Inc.**

# WIRTH GAS EQUIPMENT, INC.

P.O. BOX 3277 · GLENDALE, CA 91221  
1233 W. GLENOAKS BLVD. · GLENDALE, CA 91201  
PH: 323-245-9523 · AZ: 602-254-6225 · FAX: 818-243-3382

---

August 18, 2016

ETS, Inc.  
Christina Clark  
1401 Municipal Road NW  
Roanoke, VA 24012

Re: SCAQMD Technical Assessment

As a supplier of industrial combustion equipment I am particularly concerned in regards to the districts assessment of the "Burner availability and feasibility to retrofit units." They initially state, "testing program indicates that the rule limits are achievable for all categories of equipment with current available technology," and then proceed to note three areas where in fact that is not the case.

They acknowledge the existence of oven burners rated for 400K Btu/hr. capable of meeting the <30ppm Nox emission limit. They then proceed to recommend exemptions for burners with a maximum rated capacity of 325K Btu/hr. or less. In other areas of this document they address the delay or exemption for equipment that produces < 1lb. of Nox emissions per day. If this is in fact the criteria I suggest they make the exemption for all processes/equipment at this level. If you review the Eclipse product catalog you will note this manufacture offers fifteen different style burners for air heating applications, four different style burners for furnace applications, and four different style burners for tube firing applications. Due to the design of the different burners they are capable of varying emission levels. There are cases where one style burner capable of firing at 1.0mm Btu/hr. produces 60 ppm Nox which at full capacity for twenty-four hours equals 1.464 lbs. and yet a different style produces 40ppm Nox at high fire resulting in 0.864 lbs. Under the district's proposal of exempting burners at the 325K Btu/hr. level both burners would be unacceptable and yet the < 1lb. criteria could be met with option two. The districts approach suggests any burner firing at or less than 325K Btu/hr. will produce < 1lb. of Nox in a 24 hour period. This also suggests a burner fires at full capacity the entire time it is in operation. Both of these assumptions are false and do not represent real world situations. This is like assuming since all cars have four wheels and an engine they are all capable of doing 150 mph and getting 50 mpg, while doing it.

The second area of significant concern is the heated process tanks, evaporators and parts washers. In exempting existing units from meeting a <60 ppm requirement they are acknowledging that a good replacement piece of equipment does not exist. They state their testing has identified three types of heating systems that comply with the Nox emission limit and yet do not specifically identify what these systems are. As one who has supplied combustion equipment for these applications for over forty years


I do not know what equipment the district is aware of and do not understand why this information is not provided by the district if in fact it does exist.

It is my opinion that not only a good replacement burner does not exist to meet the required firing conditions for immersion heating, but a good immersion burner that will meet a <60 ppm Nox requirement for new units does not exist. The only unit I am aware of, which is available from a division of our principal company, requires firing tubes that are four times larger than current standard equipment. Using this "low Nox" option requires a tank that needs to be four times deeper to accommodate the tube. A deeper tank means more solution which means higher Btu/hr. input to heat more solution which means more lbs. of emissions. One step forward and ten steps backwards.

Exempting existing units until the tank is modified or replaced encourages industry to continue to use old, outdated, in-efficient equipment as long as possible. Additionally it does not honestly address the need for new equipment and falsely supports the suggestion that equipment to meet this requirement in a properly engineered design exists.

Thank you for your consideration of the issues I have raised. Please feel free to contact me if you have any questions or need any clarification. I have enjoyed helping industry meet their industrial heating requirements in an efficient, practical, and clean fashion for many years and hope to be of benefit for the future.

Regards,

  
Allan Roughton

## **Appendix D, Attachment D-4**

### **Stakeholder Item #8 – Industrial Process Equipment, Inc.**

**NOTE: All of the Burner Manufacturer Information and CAD Drawings That Were Mailed to ETS from the Stakeholder for the Information Discussed in Item #8 Have Not Been Included in This Report, but Can Be Provided if Needed**



See us on our website: [www.ipeontime.com](http://www.ipeontime.com)

**August 22, 2016**

**Attention: Rule 1147**

To Whom It May Concern, I have been following rule 1147 for many years. I have been building spray washers for over 43 years.

In one of the meetings they changed the ovens burners from 20 ppm to 30 ppm due to the fact there were no burners that would comply. Staff did not have technical backing to support a burner to meet the 20 PPM.

The washer burners did not get the same attention. I feel the tube fired washer burners should be exempt along with other burners in this category or change the rule to 100 PPM.

From my findings:

I have provided information on the Eclipse IJ burners along guarantees of their NOX levels for some of the different size burners and specs on the burners. The NOX numbers range from 80 to 90 PPM@3% O<sub>2</sub> dry.

I have provided information on the Maxon Tube O Therm tube fired burner, in their literature there is no commitment to any guarantees or listing of their NOX levels. This Maxon Tube O Flame burner is somewhat a comparison choice to the Eclipse IJ tube fired burner.



I have supplied information on the Maxon XPO Immersion burner, information shows no NOX information. One of the problems with retrofits and even new applications for this type of new burner is the first 8 feet of the fire tube is 24" in diameter versus the Eclipse IJ 8" tube diameter 3'000'000 BTU/Hr and the Maxon Tube O Therm 8" tube diameter 3.5 million BTU/Hr. The small tube to me is very efficient due to the fact it will not get the chemical building up on the tube and not allowing heat to get out of the tube. The old stile burners where larger and the chemical would build up and the fire tubes would burn up because the heat could not get out of the fire tube to the water due to the insulating effect from the chemical building up. The burners prior to these new style burners were 69% efficient, Maxon Tube O Therm and the Eclipse IJ burners are 80% efficient. The tube sizes were larger in diameter.

I would add that even the Maxon XPO burner is not a good solution for even a completely new application since the tank would have to be significantly deeper, thus requiring more water and more heat input to heat the water. Additionally, the heat exchanger layout could not be well accommodated. Thus there are not good solutions to wash tank applications and thus the wash tank applications should be exempted from the rule. I believe this burner has not been achieved in practice on enough pieces of equipment, this needs to be addressed to when and where these pieces of equipment have been used and tested.





I have supplied information on the Titian Heater, no information or guarantees on the NOX level. There max firing rate is 450,000 BTUs/Hr. Most of our washers are 2,000,000 BTUS/Hr or more. The tube diameter is 4" to 6". You would need 5 burners and tubes to do 2,000,000 BTUS/Hr. Not a practical or efficient design. There is no good way of cleaning the tubes and you would need to put somewhere? There would be 5 stacks going up thru the roof. This is an old style application. Goes back to the first washer ever built.

Please see the Comparison Drawing of the tanks with an Eclipse IJ6 burner tube arrangement and a Maxon XPO burner. Please see the difference in the tube layout and the tank size. The spray washer tank that we have drawn is for a washer spraying 860 gallons per minute of spray at 140 degrees F. I supplied BTU calculations for this type application. This application requires this size burner to heat up the amount of gallons at start up. When the solution gets to temperature the burner throttles down as low as 500,000 BTUS/Hr. and keeps the solution at temperature. When the tube fired burners throttle down is when the NOX levels go up.



I have a Major Question since the rule was started years ago, I have been asking the district and staff for years about what was the mean when the rule was started or what is the goal to achieve as far as a reduction of NOX. I provided a chart of companies that have shut down or moved out of California due to the costs of doing business in California. One major cost is dealing with AQMD. Just the BTUS/Hr that I know of, adds up to 373,620,000 as you can see on my sheet. Seems the goal is having no manufacturing in California.

If you should have any questions, please feel free to ask.

**Sincerely,**

**Industrial Process Equipment Inc.**

**Jim Waggoner**  
**President**  
**Industrial Process Equipment Inc.**  
**Ph 951 808-9192 ext 313**  
**Company Fax 951 808-9194**  
**Cell 714 984-4783**  
**E Mail: [jimw@ipeontime.com](mailto:jimw@ipeontime.com)**

**Appendix D, Attachment D-5**

**Stakeholder Item #9 – Furnace Dynamics, Inc.**

**NOTE: Stakeholder Item #9, Exhibits A - J Were Excluded From This Report Due to Stakeholder Request to Maintain Company Confidentiality Regarding Financial Information**



***FURNACE DYNAMICS, INC.***

261 Euclid Ave.  
Long Beach, CA 90803  
562-433-3025

August 23, 2016

Ms. Christina Clark  
Engineering Manager  
ETS, Inc.  
1401 Municipal Road, NW  
Roanoke, VA 24012

Dear Christina,

I have included an overview of the Technology Assessment as well as a case study of a specific plant that is now in compliance with Rule 1147. The facility is a job shop powder coating company. We received actual accounting of dollars spent in compliance that include all phases of each project this formed the basis for our cost effectiveness evaluation.

**Personnel Background:** I have been involved with combustion devices since 1971 with the development of an advanced technology boiler. In 1980 I started a company to engineer, design and manufacture waste heat recuperators to be applied to high temperature forge and heat treat furnaces. I have been providing clients energy efficiency consulting from 1980 to the present. Over the years we have designed the combustion systems for approximately 120 furnaces in forge, heat treating and the metal melting industries. Concurrent with the energy efficiency consulting, we have set up the combustion systems for approximately 7,000 temperature uniformity surveys to satisfy aerospace requirements. We have also engineered and designed many heat treat and forge furnaces that will accommodate furnace loads of up to 200,000 pounds and temperatures up to 2300F. Through the last 29 years we have been providing air quality consulting to a wide variety of organization disciplines and have assisted staff in rule development for the RECLAIM Program and multiple other rules including Rule 1147.

**Technology Assessment:** The Technology Assessment covers a vast array of devices included in Rule 1147. Based on the database I received from staff on the devices included in 1147, there are approximately 270 categories of equipment contained therein and approximately 6,500 devices. With the limited ETS contract value, it would be impossible to evaluate a large number of sources. I therefore recommend that a relatively few (but representative) number of sources be evaluated where actual data exists. We have provided data from one such facility for your evaluation and consideration. The data provided represents the real cost of compliance and the real cost effectiveness of the retrofits. See Exhibits A – I.

*Innovative Consulting and Furnace Designs For Industry*

**General Comments Regarding the Technology Assessment:** There are a couple of actual examples of where the staffs position and reality depart. A case in point is one of our forge company clients. Whereas, I was able to conduct some fine tuning and get 7 of the 8 furnaces to comply, the last could not be tuned into compliance. Quotes were obtained from the five largest burner manufacturers. All suppliers would guarantee the NO<sub>x</sub> values but none would also guarantee an acceptable temperature uniformity survey required by the aerospace industry. If you cannot pass an acceptable uniformity survey, you cannot use the furnace. In this case the issue was trying to adopt a low NO<sub>x</sub> burner to a furnace that was not designed for their use at the time of construction.

There are other examples of the same issues. In the meeting with staff, Mr. Barcikowski suggested there was an acceptable emersion heater burner that could be used in wash tanks. The burner has a maximum input of 450,000 BTU/hr. On a 3MMBTU/hr application there would have to be over 6 burners each with its own immersion tube. Due to the nature of these tank designs this is not an acceptable solution and thus should not be given any consideration. There are also Maxon XPO burners for immersion tube applications, they require a tube of between 18” – 22” in diameter that would extend into the tank up to 6 feet. To accommodate the larger burner, the tank would have to be deeper and potentially wider. This would require a larger amount of water or solution to be heated thus more BTU input. For numerous reasons this is not an acceptable solution. Thus these wash tank applications should be exempted and even new applications would not be deemed feasible. These are just a few examples, there are probably many related to the unacceptable nature of a retrofit project.

We have included a cost effective spreadsheet that relates to a typical auto body spray booth retrofit application. As with the other comparisons, both a PTE vs. actual evaluation are included. See Exhibit J.

**ETS Consulting:**

In the meeting with stakeholders and staff you heard staff indicating they must use default emission factors. However, we believe the public, the SCAQMD Governing Board, the ARB and EPA should be told the emissions profile and cost effectiveness that relates to individual units compared to assumptions based on default values. To achieve this, actual case studies should have been involved, not gross assumptions. At the outset of rule development, actual case studies should have been conducted to provide assurances that the basis of the program was valid and represented real emission values and actual cost effectiveness evaluations. By using assumed values and potential to emit criteria, the initial emissions from the array of sources included in Rule 1147 is over stated as well as the amount of reductions achieved by the rule. At the same time the cost effectiveness can be vastly understated.

**Pretesting to Determine the Current State of Compliance:** We use one of the new Testo 350 emission analyzers. It is the most advanced analyzer on the market. Over the last 3 years, we have conducted approximately 190 pretests. Approximately 2% of those tests were conducted on larger furnaces that fall under the RECLAIM Program. The rest have been Rule 1147 devices. They include heat treat, forge, powder coating, precision casting, etc. The temperature ranges run from about 300F to 2250F. We have also conducted approximately 70 parallel tests with official source test companies. Predominantly, our results are within 2 ppm NO<sub>x</sub> of the official test. I have gone through the SCAQMDs work shop on using portable analyzers and passed the test required for certification. Our goal is to inform companies of their compliance status and determine if retrofitting of the equipment is required. Refer to Exhibit A for pre testing data.

We also have provided tuning of the equipment to determine if compliance can be achieved. With our software and a laptop computer connected to the analyzer, we can observe, in real-time, the results of the tuning activity. Within the confines of the tuning activity, we will evaluate how the equipment is normally operated for the job done at the client site. We will make adjustments to determine if compliance can be achieved – without having any negative impact on the company's normal operation. Whereas, not all tuning attempts are successful, we have adjusted or worked with others to fine tune approximately 37 devices that would not have complied in the initial state of tune. The savings to clients amounts to about \$1.3 million in not having to retrofit their equipment.

**Facility Evaluation:** I have chosen a facility where we conducted extensive pre testing in order to determine the compliance status. This testing formed a basis for the company to embark on a retrofit program prescribed under Rule 1147. We have included the results of my pretesting of their ovens. We acquired a spreadsheet of the costs associated with each retrofit conversion. The values were then used as a basis of comparing the existing emission values and thus the overall reduction and then the cost effectiveness of each device. The average firing rates were derived from actual source testing data. These values were used as the average firing rates of each of the ovens evaluated. It is important to understand that the indicated average is relevant to the understanding how the equipment actually operates. The firing rate for each oven is controlled by a temperature controller. The temperature range for this equipment is from 325F to 700F. A set point is selected and the equipment is fired to accommodate that set point. Due to the relatively low temperature of operation, the temperature is reached rather quickly, then the burners are throttled back to maintain the set point value during the production cycle. An interview with management provided the hours per day of operation. These were also used in the cost effectiveness evaluation.

**Cost Effectiveness:** I have provided some cost effectiveness charts for a specific facility and their individual equipment where upgrades to their equipment were made and source testing was successfully completed. To assure consistency with staff's methodology, I created a spreadsheet using the same formulas found in the Districts Minor Source BACT Guidelines and the same values that are illustrated in the guidelines to assure the methods are consistent with what staff used in the initial evaluation. Staffs' and our numbers compare to the exact same dollar per controlled ton.

With the attached spreadsheets, I illustrate the actual hours of operation, days per week, weeks per year, starting emission factor, the rule compliance emission factor and the costs associated with the retrofit. The formula includes the cost of money and follows the discounted cash flow (DCF) method of evaluation. Therefore, real, actual information can be evaluated. For comparison, we have included a spreadsheet next to the actual that would indicate how the District might conduct the same evaluation. As you observe there are dramatic differences. In the 2008 staff report, the cost effectiveness was stated to be in a range from \$3,000 to \$17,000 per controlled ton of emissions reduction. At a recent 1147 task force meeting, staff indicated the average cost effectiveness is \$26,000 per controlled ton. At the same time, they indicated they did not do any individual analysis. We are not sure how it is possible to provide a definitive value and then indicate no individual analysis was conducted.

You will observe, the cost effectiveness varies dramatically due to hours of operation, initial emission factors and cost to modify. It should be noted that these are real values not default or assumed values. In this company the actual cost effectiveness ranged from \$58,157/t to \$499,000/t. See Exhibits D – I.

**Cost Effectiveness Methodologies:** There were multiple values illustrated in the technology assessment. They varied in duration of the starting and ending points. Some had a 10-year cost effectiveness value and some had 15 year or even a 20 year criteria used for the evaluation of cost effectiveness. We have always been a proponent of utilizing a singular methodology of determining cost effectiveness. This has been expressed to senior staff as well as to the Executive Officer. We have also suggested that the cost effectiveness criterion should be uniform for all 1147 devices. Additive to the above, a singular – not to exceed value should be established. If the cost effective value is exceeded, an extension for compliance should be issued with enforceability included.

As you review the accompanying documents, it will become very apparent that cost effectiveness should be conducted on a case by case basis. Staff opposes this due to the extra work involved. We have offered to assist in streamlining this effort – to no avail.

**Actual Numbers vs. Default Values:** It is important that we provide actual numbers that represent actual information relating to specific devices. We have provided a profile of an actual facility. This facility has pretested the existing equipment to determine compliance and upgraded all their equipment that would not comply. In this case an existing burn off furnace was adjusted to a NOx value that proved compliance and was successfully source tested. In the company illustrated in our profile, we were not able to tune one of the burn off ovens. The result was the client spending \$94,230 to purchase a compliant replacement device.

None of the other devices pretested would pass the 30 ppm compliance requirement. In my evaluation, I have used the actual starting ppm for each device to show a comparison to the Districts default values. See the section on pretesting. The approach was to look at the actual daily use in hours then use a value that would represent the Districts approach of using 100% firing rate for the normal hours of operation and also using the default emission factor that the staff uses of 130#/MMcf natural gas (101.4 ppm). If the values for each device were to be determined based on a 12-hour day, the values would be skewed even more.

There was one oven where the O2 values were above the 19.5% where my analyzer cuts off. All the remaining ovens were pretested to determine compliance. There were cases where some of the equipment showed issues that required additional maintenance prior to determining if compliance was possible.

**Cost of Compliance:** We have provided a spreadsheet that came from the client to show the various costs for each device. The numbers vary significantly. This is due to the amount of work required to install the equipment. Significant sheet metal modification was sometimes required to accommodate the new burner configuration. In some cases, the gas train had to be updated to assure compliance with current standards.

The included spreadsheet documents the expenditures to assure compliance. The grand total was approximately \$362,683. There are some minor additional costs that will still come in due to an oven that needs to be source tested. See Exhibit C for cost evaluation.

These values include:

1. Application fees
2. Burner costs
3. Installation costs
4. Protocol fees
5. Source testing costs
6. Source test report evaluation costs



***FURNACE DYNAMICS, INC.***

261 Euclid Ave.  
Long Beach, CA 90803  
562-433-3025

There is also a cost of \$12,345 that went to pretesting the various devices and conducting some parallel testing with the source test company. These are all real costs to industry.

**Conclusions:** The Technology Assessment is rather comprehensive in nature. However, we find fault in the cost effectiveness numbers due to staffs' using default numbers and potential to emit. We have provided a series of spreadsheets that can be evaluated to determine what constitutes one pound per day of NOx based on BTU input and hours of operation at a number of average BTU inputs from PTE to an average of 20% of PTE.

It is important the staff knows that real number are more important than assumed values. Assumed value understate the cost effectiveness and overstate the actual reductions. The public, the Governing Board, California Air Resources Board and the EPA need to be advised of the real costs to industry. It does require more effort from staff in the rule making process and stakeholders need to be intimately involved in the process of developing rules. The burden of high cost effectiveness, expensive rules and sometimes marginal environmental impact should not fall on small businesses.

Should you have any questions regarding the information supplied please feel free to call me any time and I will be happy to assist you.

Sincerely,

Anthony W. Endres  
President

Enc.

**APPENDIX E**

**STAKEHOLDER COMMENTS RECEIVED AFTER AUGUST 23, 2016**

## SUMMARY OF INFORMATION RECEIVED FROM STAKEHOLDERS AFTER AUGUST 23, 2016 DEADLINE

ITEM #	DESCRIPTION OF INFORMATION RECEIVED BY ETS	NAME/TITLE	COMPANY	ADDITIONAL RELEVANT INFORMATION	DATE RECEIVED BY ETS	FOLLOW-UP BY ETS
<b>Information Received After August 23, 2016 Deadline:</b>						
10	E-mail with subject line "Emailing: img131.pdf" and an attachment file titled "img131.pdf" (3 pages). The attachment file contains an undated letter addressed to Wayne Barcikowski of SCAQMD. The letter concerns were regarding the amount of burners that needed to be changed by July 2012. The Stakeholder also suggested rule amendments for the "added categories that work for the different applications" and for burners that are on the market and have been achieved in practice for a minimum of one year. The final page of the Stakeholder letter recommends "getting with burner manufacturers to see if the below are correct categories that they can make burners for and to what type of burner will meet the PPM requirements. When can they meet the PPM requirements and then implement them into the rule."	Jim Waggoner, CEO	Industrial Process Equipment, Inc.		09/02/16	ETS response in Section IX.A of ETS Independent Technical Review Document
11	E-mail with subject line "Emailing: 25760-1- System Layout PDF.pdf" and an attachment file titled "25760-1- System Layout PDF.pdf" (1 page). The attachment file contains a CAD layout drawing dated 11/11/15 of a Conveyorized Powder Coat System with the following: a Spray Power Washer in the front that goes to a Dry Off Oven, then cools down to Two Powder Booths, and then to the Cure Oven, and then to the Unload Area.	Jim Waggoner, CEO	Industrial Process Equipment, Inc.	Attachment file "25760-1- System Layout PDF.pdf" was excluded from the ETS report since it contained client-specific details for a system located in Texas	09/02/16	ETS response in Section IX.B of ETS Independent Technical Review Document
12	E-mail with subject line "1147 Documents submitted to staff in 2008" and attachment file titled "2008 Letter to staff re 1147.pdf" (28 pages). The attachment file contains an undated document from Anthony Endres of Energy Services Corporation addressed to Wayne Barcikowski. The letter discusses the applicability of the 60 ppm NOx emission limit to different types of metal melting and heat treating furnaces. The commenter proposes each type of furnace should have a different NOx emission limit. The letter also contains a general discussion of BACT for new metal melting and heat treating furnaces that proposes that each type of furnace should have its own BACT limit. Finally, the Stakeholder recommends the use of a pounds per hour basis for determining compliance based on the pounds per hour emitted at 100% for a given burner or classification of equipment.	Anthony Endres, President	Furnace Dynamics, Inc. (Energy Services Corporation)		09/20/16	ETS response in Section IX.C of ETS Independent Technical Review Document

**Appendix E, Attachment E-1**

**Stakeholder Item #10 – Industrial Process Equipment, Inc.**

Wayne Barcikowski  
Air Quality Specialist  
SCAQMD  
21865 Copley Drive  
Diamond Bar, Ca. 91765

Mr. Barcikowski,

Thank you for allowing rule 1147 to be amended.

As you know this rule allows us added business so we are not here to stop any progress.

The reason that I will be mentioning the below is that I do not want to see companies in a penalty situation as to the reason it was important to put the rule on hold before the end of the year. This would cost business's time and money to deal with. Thank you.

There are too many burners in the industry to change by July 2012. It has taken 4 months to get permits to construct and I know of others waiting for months to get an acceptance to the test protocol after they get the permit to construct.

We need to have the rule amended for the added categories that work for the different applications. The rule is way to general for this industry.

I believe the rule needs to be amended for what is on the market and the burners are achieved in practice for a minimum of one year. I know the smallest Low Nox Burner that Eclipse makes is a 500,000 BTU which works very nicely for an oven application. One of the situations is that we use to put in oven burners that were 1,500,000 BTU'S and now we would have to put in 2,000,000 BTU burners on. The burners use more gas do to the fact that the burner requires more ambient air to get the same Btu's as the old burners and as you can see the burners require to be larger. This follows the same perimeters as the burners go up in sizes.

Multiple units, dead line to me does not work. Some people have more than 20 burners to rework. What does that look like in a feasibility study?

We have actual costs for one burner up grade of \$ 26,865.32 plus down time of the factory.

No equipment normally is exactly the same, each burner needs to be adjusted at the time of start up. We manufacturer ovens from 2700 square foot to 80 square foot. This does not allow for having equipment certified.

Burn Off Systems, heating chamber and afterburner. This equipment works in conjunction with each other with all the effluent going through the afterburner. This unit is not an oven/afterburner. AQMD permits are specified to run the afterburner and then turn on the oven. Both units can not work separately due to the safety circuit.

What happens in 15 years if there is nothing better to go to?

I believe it will be 5 to 10 year process to change the burners, we have changed 2 burners since 2009, 4 months to get a permit to construct for a burner upgrade to Low Nox from AQMD. If you do a simple calculation of say 492 burners per year divided by 60 per year = a minimum of 8 years. There are not enough technical people in the industry and time that it takes to change all of these burners. It will just put companies in a violation situation. Why would we allow this to happen to our economy?

It is interesting we are asking to change burners when there are old ovens, other equipment and the design of the equipment is very inefficient?

We have lost a minimum of 111,000,000 BTUS out of the South Coast Air Basin that come to mind plus many others over the past 10 years.

It is interesting in our last meeting of the workshops before the rule went into effect that the Nox level was set at 20 PPM on ovens and just by asking a question if the burner manufacturers made a 20 PPM burner and both manufacturers said no, the rule was changed to 30 PPM right on the spot. For other burners categories that the burner manufactures did not make burners to meet the PPM levels at this point, the rule did not get changed and now the time line has been extended to a future date.



I would recommend getting with the burner manufactures to see if the below are the correct categories that they can make burners for and to what type of burner will meet the PPM requirements. When can they meet the PPM requirements and then implement them into the rule.

### **Gaseous Fuel Fired Equipment**

Asphalt Manufacturing Operation

Afterburners, Degassing Units, Redemption Units, Catalytic Oxidizers, Vapor Incinerator, Crematory, Incinerators, Caliners, Cookers, Roasters, Furnaces, Heated Storage Tanks, Evaporators, Fryers, Heated Immersion Process Tanks, Parts Washers, Conveyorized Spray Power Washers, Metal Heat Treating, Metal Melting Furnaces, Melting Pots, Tar Pots, Kilns, Burn Off Systems, Heating Chamber and Incineration Systems

Cure Ovens, Dry Off Ovens, Dryers, Carpet Dryers, Fabric Dryers, Heat Treat Ovens, Paper Making Dryers, Food Baking Ovens, Textile Production , Grain Drying, Heat Exchangers

Direct Fired Burners for Cooking, Ribbon Type

Heat Paint Spray Booths, Make Up Air Units

Tenter Frame

What is a Other Unit or Process Temperature?

### **Liquid Fuel Fired Equipment**

What is a All Liquid Fuel-Fired Unit?

Thank you for taking the time to review. Please let me know your thoughts or questions.

Jim Waggoner  
Industrial Process Equipment Inc.  
1700 Industrial Ave.  
Norco, Ca. 92860

714 984-4783 Ext. 313

## **Appendix E, Attachment E-2**

### **Stakeholder Item #11 – Industrial Process Equipment, Inc.**

**NOTE: Stakeholder Item #11, Attachment File “25760-1- System Layout PDF.pdf” Was Excluded From This Report Since it Contained Client-Specific Details**



## Christina Clark

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**From:** Jim Waggoner <JimW@ipeontime.com>  
**Sent:** Friday, September 02, 2016 2:25 PM  
**To:** christinac@etsi-inc.com  
**Subject:** Emailing: 25760-1- System Layout PDF.pdf  
**Attachments:** 25760-1- System Layout PDF.pdf

Hi Christina, see an attached Conveyorized Powder Coat System which has the following functions to complete the system. Spray Power Washer is in the front then goes to the Dry Off Oven then cools down to the Two Powder Booths and then to the Cure Oven and then to unload.

This is much more than a wash tank, the Spray Power Washer is part of the System.

Have a nice weekend.

Thank you

Jim Waggoner

CEO

Industrial Process Equipment, Inc.

1700 Industrial Ave, Norco, Ca. 92860

Ph (951) 808-9192 Ext 313 Fax (951) 808-9193 Cell (714) 984-4783

e-mail [jimw@ipeontime.com](mailto:jimw@ipeontime.com)

**Appendix E, Attachment E-3**

**Stakeholder Item #12 – Furnace Dynamics, Inc.  
(Energy Services Corporation)**



ENERGY SERVICES CORPORATION

261A Euclid Avenue  
Long Beach, California 90803  
Tel: 562-433-3025 Fax: 562-433-9282

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AIR QUALITY AND ENERGY EFFICIENCY CONSULTING

Mr. Wayne Barcikowski  
Air Quality Specialist  
South Air Quality Management District  
21865 E. Copley Drive  
Diamond Bar, CA 9176530-Oct

RE. Proposed Rule 1147.

Dear Mr. Barcikowski,

The following dialogue will further clarify many of the comments made during the consultation meeting held at the District on October 28, 2008. I feel that even though a large number of relevant issues were discussed a more in depth analysis is required to shape a cogent understanding of the critical elements of the rule and the associative implications to industry. My area of expertise is in the metal melting, heat treating and forging industries.

I represented this industry group during the formation of RECLAIM on 4 separate advisory committees. Over the years I have set up the combustion systems for over 6,500 temperature uniformity surveys in forging and heat treating applications. I have designed the combustion systems for about 100 furnaces in Southern California. We currently design forging and heat treat furnaces that satisfy the needs for product heating and temperature uniformity. I have worked with staff to assist in the rule making process that has yielded an improved understanding from industry to the SCAQMD rule making process and also worked with the SCAQMD to help them understand the technical challenges of industry. Ultimately, the net result was rules that make sense for both the SCAQMD and industry. I have updated and included a paper that I wrote a few years ago discussing the differences in heat treat furnaces as related to BACT. The tenant of the discussion is that an emission level that is applicable to one classification of heat treat furnace is completely inappropriate to other heat treat furnaces. Forge furnaces though more limited in nature in the design and operation compared to heat treat furnaces have the same relevant issues that are affected by this proposed rule. To this end, I present the following for your consideration and reflection.

### Issues Relating to Proposed SCAQMD Rule 1147

A number of very serious issues were discussed in the meeting that has significant implications as to how the proposed rule affects certain segments of industry.

**RULE LANGUAGE AND CONTENT:** The following are issues relating to the specific rule language, intent or relative emissions limit.

**1147(C)(1) Table 1 NO<sub>x</sub> Emission Limit.** This table is entirely too broad as related to ***Metal Heat Treating (metal forging)*** and ***Other – Process Temperature > 1200°F***. Refer to included paper on BACT for Heat Treating Furnaces for insight into the industry and the variety of associated heat treat furnaces. As an example, the same furnace can operate from 800°F to 2250°F. The emissions at these two ranges can be very different in the same furnace let alone furnaces of significantly different configurations. The staff needs to define the configuration and type of furnace for this to make sense. The ***Other – Process Temperature > 1200°F*** category is not acceptable due to the lack of definition. This paints perhaps a very large grouping of equipment with the same brush. That would be like saying a hippopotamus and a giraffe are the same because they are both animals and have four legs. While there may be some equipment in this category the NO<sub>x</sub> value of 60 ppm may be acceptable, there could be many others where this is not acceptable.

The same is true for the next category requiring 20 ppm. This is again too broad a listing of equipment without specifying which equipment in that category applies. The 30 ppm grouping of equipment suffers from the same inadequacy of the preceding grouping of equipment. As stated above there are many furnaces that operate in a range from 800°F – 2250°F, does this mean that the equipment would have to be 30 ppm when operated between 800°F and 1200°F and 60 ppm > 1200°F?

**Rule 1147(C)(9)** This section should define that if a timer is used the time be connected to reflect only the time of operation of the device, not the total time that electrical power is applied to the device.

**Rule 1147(d)(3)(D)** the last word should be “or” not “and”.

**Rule 1147(d)(3)** The section relating to source testing should have a section **(G)** added to allow EPA Method 19 “F” factor calculations where the device being tested does not possess a traditional flue that could utilize the previous indicated test methods.

Another section should be added that specifies that if an existing combustion system satisfies the applicable requirement, that compliance may be satisfied by a source test pursuant to one of the provisions under (d)(3)(A)-(G)

**1147(g) Exemptions.** There needs to be an added exemption placed in this section pursuant to the inability of combustion company manufacturers to guarantee compliance with the NO<sub>x</sub> levels and temperature uniformity surveys required by aerospace specification such as AMS 2750D. This is addressed in detail in the body of this discussion.

#### **Comments Relating to the Preliminary Draft Staff Report**

**Page 1-3 Technology Assessment, Low NO<sub>x</sub> Burner Technology, paragraph 4:** In the comments relating to the use of staged combustion where there is a fuel rich zone and a lean zone, it is not mentioned that this type of burner requires the chamber temperature to exceed 1600°F to function. Therefore use on a lower temperature furnace could be ineffectual and not achieve the desired NO<sub>x</sub> reduction. Another issue is the fact that these burners, by their nature are considered a “normal” velocity burner. Whereas this technology could be used in some applications they would not provide adequate temperature uniformity surveys if placed in a furnace where compliance with AMS 2750D was required. Many of these applications require high velocity burners to maintain the required uniformity. After any modification a new temperature uniformity survey is required. If this survey fails, the furnace must be shut down. The company cannot use the furnace for processing forgings and heat treated parts.

**Page 1-4 Technology Assessment, Low NO<sub>x</sub> Burner Technology, paragraph 6:** This paragraph addresses the use of excess air to reduce NO<sub>x</sub>. Whereas, this methodology does reduce NO<sub>x</sub> by reducing hot mix temperature, its primary purpose in heat treating and forging is to improve temperature uniformity at lower operating temperatures. The last sentence in this paragraph is fundamentally incorrect. By virtue of the fact that excess air is used, the loss of efficiency cannot be adjusted out without loss of efficiency or increase in fuel consumption. Refer to North American Combustion Handbook Volume 2, Available Heat chart for technical analysis. This shows how the available heat diminishes when operating at a specific furnace temperature and a specific amount of excess air.

Attached you can find 2 examples the Department of Energy Process Heating Assessment & Survey Tool (PHAST 2.0). This is a software tool utilized to analyze projects. The calculator section shows the differences in excess air and ratio firing. Also please find two printouts showing the differences in efficiency by using 2% O<sub>2</sub> (10% excess air) vs. 11% O<sub>2</sub> (100% excess air) for a heat treat application

where the fuel savings would be 46.6%. Also included is a forging application where differences in efficiency at 2% O<sub>2</sub> vs. 7.5% O<sub>2</sub> yielded a savings of 42.3%.

Whereas, the statements associated with turndown have some efficacy for some applications. Those associated with forging and heat treating face far greater challenges. This is due to varying load factors and temperature ranges of operation. The forging ranges for these furnaces range from 800F to 2250F. They are operated in an excess air mode at the lower temperatures but on ratio at higher temperatures. Since these companies are job shops, their furnace loads vary. A given furnace might have a load of 3,000 lbs. on one day and 15,000 lbs on a subsequent day. It is not unusual for a furnace to operate at multiple temperatures on any given day. Virtually all the burners used in forging and heat treating industries increase in NO<sub>x</sub> emissions as the burners turn down. NO<sub>x</sub> levels also increase as the operating temperature increases. For example, according to the data sheet an Eclipse ThermJet 100 burner at high fire generates 35 ppm, at 35% approximately 60 ppm, at 20% it generates about 80 ppm. By any measure this is a good low NO<sub>x</sub> burner. By the way the rule is written, this burner could only be operated when at a reasonably high firing rate and still maintain compliance with the rule. Yet the pounds per hour values (see the write up later in this dialogue) are much less at turndown than at high fire. Thus the actual emissions are lower. The purpose of this rule is to reduce emissions. This burner could do that but could be used in only a few applications. Staff needs to alter the compliance methodology to include pounds per hour as an alternative method assurance of emissions reduction.

**Comments relating to the consultation meeting held at the SCAQMD October 28, 2008.**

**TECHNOLOGY TRANSFER:** This topic was presented and discussed at length in our meeting. There has been a general feeling that when a combustion system manufacturer comes up with a new low NO<sub>x</sub> burner that works in a specific application, it can be utilized in a significant number of other applications with uniform success. Unfortunately this is not possible. The comments by the two burner manufacturer's representatives very well articulated this point. Due to the disparate nature of furnaces, sizes, firing rates, temperature ranges, operating conditions, etc. the utilization of a burner in one furnace may not be applicable on another furnace even within the same general usage category.

By reviewing the included paper "BACT Considerations of Heat Treat Furnaces" one will gain an appreciation of the inability of using a specific burner for one furnace vs. another in the same category. The same issues are relevant in the forging industry and metal melting industries. In forging, for

example, operating temperatures range from 800°F to 2300°F in many cases within the same furnaces. There are box furnaces, rotary hearth furnaces, slot forge furnaces, low temperature recirculating furnaces and the list goes on. Furnace sizes and configurations vary vastly depending upon the job for which they were designed. These furnaces operate in the excess air mode, ratio mode and pulse firing mode of operation. There are standard velocity and high velocity burners that are designed to provide a particular heating pattern in the furnace proper. The paper on heat treat furnaces addresses the issues of temperature uniformity. Most of the forge furnaces in Southern California are certified to forge aerospace components and critical commercial forgings. These components ultimately go into a variety of aircraft, engines, structure or various control systems. Twice a year each of these furnaces must pass customer required uniformity survey to either +/- 20°F or +/- 25°F. If the furnaces do not pass these surveys the furnaces must be shut down and cannot be used for forging of any aerospace components.

The issue came up that there were furnaces within a particular broad based classification that have passed source tests. Whereas this is true, those same burners may not yield the same results in other furnace configurations.

**Temperature Uniformity vs. NOx vs. Manufacturer Guarantee:** This issue was discussed at some length. These furnaces were designed to do a particular job and have been successful for many years. The question comes up regarding the use of a particular burner on a specific furnace that was not intended to use that burner. Two manufacturer's representatives were present one from Eclipse Combustion and the other from Maxon. When asked if they would not only guarantee the NOx values but successful temperature uniformity survey they both indicated that they could not. We believe this would be true of the other major manufacturers. The primary problem is trying to apply a burner design to a furnace that it was not designed to operate in. For instance, Eclipse has a low NOx burner that is designed to operate on higher temperature furnaces. It is a staged air type of burner. The primary combustion portion of the burner generates a fuel rich flame. That flame then combines with the bypassed air injected into the furnace through additional ports in the burner. If the furnace temperature is too low < 1600°F the recombining of the gasses cannot take place and the burner will not function properly. Thus the manufacturer would not guarantee the burner performance. Bear in mind that most of these furnaces operate over a wide variety of temperature ranges.

As was mentioned above, a specific burner cannot be used in all operations. Manufacturers have only a limited number of burner configurations that can satisfy the needs of a very large variety of furnace

configurations. Due to the overall market for these low NOx burners, manufacturers allocate a specific amount of resources for R & D relating to low NOx burners due to the relatively limited market for these products. Even then the range of available equipment is somewhat limited.

The other issue with this and other low NOx burners is that the burners are a normal velocity design. That means that temperature uniformity can be compromised. If this happens the furnace will not pass a uniformity survey, the furnace must be shut down and not operated for forging any parts requiring these surveys. The bulk of forging activity in Southern California is aerospace and critical commercial forgings also requiring these surveys.

**SAE-AMS-2750D Aerospace Material Specification:** This is the specification that covers virtually all aerospace forging and heat treating in Southern California. Whereas there are other specifications such as AMS – 6875 Heat Treatment of Steels et al that cover heat treatment of titanium and other alloys, AMS – 2750D is the major specification controlling forging and heat treating. This is a 46 page document with high degrees of specificity on a plethora of items relating to the heat processing of aerospace alloys. To improve understanding of the critical nature of this specification we have included a few sections that relate to scope (1.1), equipment modification (section 3.5.3) and temperature uniformity survey failures (section 3.5.19.1).

*1.1 This specification covers pyrometric requirements for thermal processing equipment used for heat treatment. It covers temperature sensors, instrumentation, thermal processing equipment, system accuracy tests, and temperature uniformity surveys. These are necessary to ensure that parts or raw materials are heat treated in accordance with the applicable specification(s).*

*3.5.3 Furnace Modifications: An initial TUS (temperature uniformity survey) shall also be performed after any furnace modification or adjustment that could have altered the temperature uniformity characteristics of the furnace. Examples where an initial TUS shall be required include, but are not limited to the following:*

- Increase in the maximum qualified operation temperature or the decrease in the minimum qualified operating temperature*
- Burner size, number, type, or location change*
- Changes to air flow pattern/velocity*
- Change to refractory thickness*
- New refractory with different thermal properties*



- *Change in control sensor location*
- *Change in combustion pressure settings from the original setting*
- *Temperature control scheme change (proportional versus high-low/off-onn)*
- *Adjustment to tuning constants*
- *Work zone volume increase covering area not previously tested*
- *Work zone location change covered area not previously tested*

There are a few other items that cover electrically heated furnaces that were not included. The last section (3.5.19) for reference is the one that addresses TUS failures. See the following:

*3.5.19.1 If the temperature uniformity is not within the tolerances of Table 8 or 9 (parts and raw material furnace classification based on furnace class), the cause of the deviation shall be determined and documented and the requirements of 4.2 shall apply. The equipment shall not be used for additional processing until the cause has been corrected and the TUS has been performed successfully.*

*4.2 In the event of any test failure or out of tolerance condition, an evaluation of the possible effects of the non-conformance on product processed since the last successful corresponding test shall be performed and documented. The evaluation shall be documented per established material review procedures; appropriate corrective action shall be taken, documented and maintained on file. When material processing conditions deviate from specification requirements affected purchaser(s) shall be notified.*

In essence AMS – 2750D controls all aspects of how a furnace is operated. If a TUS is not successful after a modification to the furnace as indicated in 3.5.3 the furnace cannot be used for forging and heat treating aerospace parts.

Therefore, without manufacturers guarantee of both NOx and successful uniformity surveys, the companies would be reluctant to purchase a burner that could put them out of business. This could constitute a taking of property.

**Recommendation:** *We would recommend that staff needs to rethink their position that the same burners can universally be used on a wide range of applications without any actual testing on specific furnace configurations. Further, without manufacturer's guarantees these classifications should not be considered in the rule structure at this time. Perhaps with more in depth analysis by industry, the*

*SCAQMD and manufacturers in a subsequent rule could generate a rule that is more specific in nature and that would not potentially put companies out of business. We would be willing to assist in this effort. Unfortunately, due to the time constraints posed by the presentation to the Governing Board, a significant amount of unresolved technical issues are yet to be resolved. Further exacerbating the issue is the problem that in some of these categories even years downstream, burners that a manufacturer would guarantee to meet both emissions levels and uniformity requirements may still not be available. As has been indicated the South Coast Air Basin represents a very small percentage of the total market for combustion equipment. Prior to invoking a rule as extensive as PR 1147, manufacturers must have the equipment available, tested and guaranteed for each specific application.*

**BACT vs. Furnace Configuration:** As was discussed in the heat treat furnace paper, BACT could vary for different furnace configurations. Some furnaces may lend themselves to relatively easy source testing while others would create significant problems. For instance, slot forge furnaces. They do not have any physical flues and have open slots. There are no doors due the nature of the furnace configuration and the way they forge parts. Due to this configuration there is some air infiltration, NOx values are affected by this infiltration. To our knowledge there are no low NOx burners that have been successfully used on this furnace configuration and in talking to the manufacturers; they would not guarantee results in combination with acceptable uniformity surveys.

**Recommendation:** *When combustion equipment manufacturers will not guarantee Rule compliance results from a NOx value AND successful temperature uniformity surveys in these critical heat treat and forging industries, the District should not include those industries in this proposed rule. Thus these and many other types of furnaces with similar issues should be dealt with at a future date when and only if technology is available that would allow the manufacturers to guarantee NOx and uniformity surveys.*

**Compliance Dates:** An issue also addressed at the meeting was compliance dates. There are a number of companies; one which was represented at the meeting, that has a significant number of furnaces. To require all of these to be retrofitted by a certain date would represent a severe economic burden, particularly in slow economic times.

**Recommendation:** *In this case it would be recommended that extending the compliance dates over a period of years would be a reasonable approach. The intent would be achieved without the company*

*incurring financial peril. The rule might be tied into the overall cost of the projects or a quantity specific retrofits that would be required per year.*

**Cost Effectiveness:** This area is one that came under discussion that deserves due consideration particularly due to the size of many of these units. The district has indicated a cost effectiveness of \$6,000 - \$13,000 per ton emitted. If the District believes these are the general rule that could be a consideration, however, for the very small sources that emit extremely small daily, weekly or annual emissions, the cost could be extremely high relative to the net benefit to the environment. We feel that in these few cases the typical BACT guidelines cost effectiveness should apply. Bear in mind that these sources are typically on the very small end of the emissions scale. For the smallest sources included in this rule the device may only produce 50 or so pounds/year. Going from 90 ppm to 30 ppm reduces this to about 18 pounds/year. It is conceivable that the Districts DCF (discounted cash flow) cost to control could be \$30,000/ton to perhaps \$200,000/ton depending upon the application. Two examples are included.

**Recommendation:** *The staff should consider the cost/benefit relationship in these few isolated cases. This consideration should be placed in the rule rather than requiring these companies to go through the further expense of getting an attorney to represent them in a hearing board for a variance. This is particularly true due the minimal emissions generated and thus reduced.*

**Pounds/Hour vs. ppm:** Most burners that could be utilized in metallurgical operations are medium or high velocity burners. The exit velocity can be as high as 300 mile per hour. This very high velocity induces an in-furnace recirculation of products of combustion. The result is a lowering of NOx emissions at the maximum firing rate of the furnace proper. As the firing rate is reduced the NOx levels in ppm tend to go up due the reduced exit velocity of the products of combustion. However they go up at a lower rate than the relative reduced energy input. Thus at maximum firing rate the total emissions entering the atmosphere are higher than the emissions generated at a lower firing rate, even though the ppm values have risen. For instance an Eclipse ThermJet TJ100 burner (1MMBTU/hr capacity) emits an estimated 35 ppm, however as the firing rate decreases, the NOx levels go up, as an example, at approximately 35% firing rate (350,000 BTU/hr) the NOx levels are about 60 ppm. At lesser percentages of the maximum firing rates the NOx levels are actually higher. The result is actually lower NOx into the atmosphere.

The following is a very important note that accompanies the charts in the Eclipse data sheets. This statement is indicative of all manufacturers and what they will guarantee for a particular application. The charts are a general guide. The actual conditions under which a particular burner is used dictates the actual NOx values. The Eclipse data sheet states:

*“Emissions from the burner are influenced by:*

- 1. Fuel type*
- 2. Combustion air temperature*
- 3. Firing rate*
- 4. Chamber conditions*
- 5. Percent of excess air”*

As a general rule, as the chamber temperature increases the NOx levels go up. A furnace operating at 1600°F will generate considerably lower NOx than the same furnace operating at 2200°F. With that in mind, let us review the example below that shows the pounds per hour of emissions into the atmosphere vs. the firing rate and ppm values. The actual NOx value for a given furnace would still fall on what the manufacturer is willing to guarantee at a specific furnace operating condition for that process. Thus with the same burner Eclipse (or any other manufacturer) would guarantee a higher NOx level for a high temp forge furnace than a lower temperature furnace using the same burners. Again one size and one burner do not have the same characteristics in multiple applications.

Observe:

20% firing rate = 80 ppm = 102.6 lbs / MMcf

35% firing rate = 60 ppm = 76.9 lbs / MMcf

100% firing rate = 35 ppm = 44.9 lbs / MMcf

100% firing rate = 1,000,000 BTU/hr / 1020 BTU/cf = 980 cf/hr.

35% firing rate = 350,000 BTU/hr / 1020 BTU/cf = 343 cf/hr

20% firing rate = 200,000 BTU/hr / 1020 BTU/cf = 196 cf/hr

*Therefore:*

At 100% firing rate NOx emission are:  $(980 / 1,000,000 \text{ cf}) \times 44.9 = \mathbf{.044 \text{ pounds of NOx per hour}}$

At 35% firing rate NOx emissions are:  $(343 / 1,000,000 \text{ cf}) \times 76.9 = \mathbf{.026 \text{ pounds of NOx per hour}}$

At 20% firing rate NOx emissions are:  $(196 / 1,000,000 \text{ cf}) \times 102.6 = \mathbf{.020 \text{ pounds of NOx per hour}}$

In the above example, it is readily seen that even with the lower firing rate and higher ppm values the emissions entering the atmosphere are actually considerably lower.

***Recommendation:*** We therefore propose that the District use a pound per hour basis for determining compliance. This would be based on the pounds per hour emitted at 100% for a given burner or classification of equipment. Therefore the pounds per hour for that device will never exceed the emissions rate of the equipment operated at 100% firing rate. The intent of the rule is met, the flexibility is established and at no time would the emissions exceed the maximum atmospheric emissions of maximum firing rate. The SCAQMDs main concern should be the total pounds of NOx entering the atmosphere. Using ppm is only a part of the picture.

**Conclusion:** This proposed Rule 1147 has a multitude of problems on a technical basis. There are so many unresolved problems that it is recommended that further input from knowledgeable industry representatives and burner manufacturers be further consulted prior to submittal to the Governing Board. This would result in a much improved rule for the District and industry. Currently the proposed rule is heavily flawed. It serves no purpose to proceed with a rule that is unworkable for various segments of industry. The only alternative would be to exempt various segments of industry from this rule where manufacturers are not willing or able to guarantee NOx emissions results AND temperature uniformity surveys. Failed uniformity surveys put these companies out of business.

We have included some reference material for your consideration and evaluation. We believe this material supports the various presented statements above. Should you wish some additional information that relates to the above dialogue, we can provide whatever additional information will be helpful in assisting your increased knowledge base of our industry.

As always, we stand ready to assist the SCAQMD in their efforts to clean up the air in the SCAB. Rules to be effective must be well thought out. The breath of this rule demands high degrees of technical acuity by those developing the rule. Too much technical work remains for this to be deemed an acceptable rule.

Sincerely,

Anthony W. Endres  
President

Enc.

## REFERENCE MATERIAL

1. DOE Calculator section showing a typical heat treat application. The comparison shows the relationship of efficiency when operating on excess air vs. ratio when operating the furnace at 1600°F.
2. DOE Calculator section showing a typical forging application. This comparison shows an excess air vs. ratio when operating a furnace at 2200°F.
3. Cost effectiveness calculation showing a typical forging application. All the formulas are those used for BACT Cost Effectiveness Evaluation presented in District publications.
4. Cost effectiveness calculation showing a typical soil remediation application. All the formulas are those used for BACT Cost Effectiveness Evaluation presented in District publications.
5. Eclipse ThermJet Model TJ0100 Data Sheet. Page 2 shows the NOx values at different firing rates.
6. Paper “BACT Considerations of Heat Treat Furnaces” that articulates the differences in configuration of heat treat furnaces.



U.S. Department of Energy

Energy Efficiency and Renewable Energy

Bringing you a prosperous future where energy is  
clean, abundant, reliable and affordable

Energy Equivalency	Efficiency Improvement	O2 Enrichment		Flow Calculations Energy Use
		Current	New	
Flue Gas Oxygen (% Dry)		11	2	
Flue Gas Temperature (Degree F)		1600	1600	
Excess Air (%)		98.45	9.42	
Combustion Air Temperature (Degree F)		70	70	
Available Heat (% of HHV)		28.06	52.59	
Fuel Savings (%)		Base	46.64	
Energy Input (MM Btu/hr)		4	2.13	

O2 when running in  
excess air mode  
vs. on ratio

Furnace operating  
temperature

% fuel saved by  
operating in the on  
ratio mode

Fuel required when  
operated in the  
ratio mode vs.  
excess air

Save

Close

Previous

Next

Heat Treat Furnace Operation  
Typical Heat Treat Operation



Energy Equivalency	Efficiency Improvement	O2 Enrichment	Flow Calculations Energy Use
		Current	New
Flue Gas Oxygen (% Dry)		7.5	2
Flue Gas Temperature (Degree F)		2200	2200
Excess Air (%)		49.72	9.42
Combustion Air Temperature (Degree F)		70	70
Available Heat (% of HHV)		21.11	36.57
Fuel Savings (%)		Base	42.28
Energy Input (MM Btu/hr)		4	2.31

Save

Close

Previous

Next

Excess air mode of operation vs. on ratio mode

Furnace operating temperature

% Fuel saved by operating in the on ratio mode at 2200F

Fuel required at this temperature vs. fuel required in the excess air mode

Forge Furnace Operation  
 Typical High Temperature operation

## COST EFFECTIVENESS CALCULATION

### Type of Project

### Forge Furnace

#### Use

Hours per Day	16
Days per Week	5
Weeks per Year	50
Annual Hours of Use	4000 Hours
Gross Input BTU/hr	4,000,000 BTU/hr
Average Input (%)	40% % Input
Average BTU Input	1,600,000 BTU/hr
Starting Emissions	80 ppm
Pounds/MMCF	102.56 #/MMCF
Pounds per Hour	0.156

**Annual Emissions** **625 # Nox/Year**

#### Modified Source Emissions

Average Input (%)	40% % Input
Average BTU Input	1,600,000
Starting Emissions	60 ppm
Pounds/MMCF	76.92 #/MMCF
Pounds per Hour	0.117
Annual Emissions	469 # Nox/Year

**Annual Reduced Emissions** **156 # NOx/year**

Annual Tons Reduced	0.078 T/Y Reduced
10 Year Emissions Reduction	0.781

#### Equipment Costs

Burners	\$ 5,000
Engineering	\$ 1,000
Piping Costs	\$ 1,000
Installation Costs	\$ 800
Refractory Cost	\$ 500
Start Up Costs	\$ 300
Loss of production	\$ 5,000
Gas Meter & Gages	\$ 3,000
Permit to Construct Fee	\$ 2,051
Source Test	\$ 2,200
<b>Equipment Cost</b>	<b>\$ 20,851</b>

#### Annual Costs

Surveys 2 per year	\$ 1,000 per year
Periodic Maintenance	\$ 500 per year
Source Test 5 years	\$ 2,500 once every 5 years
Cost 10 Year Cost	\$ 15,250
<b>Annual Cost (10 year average)</b>	<b>\$ 1,525</b>

**DCF Cost Per Ton Reduced** **\$ 42,510**

## COST EFFECTIVENESS CALCULATION

### Type of Project

### Soil Remediation

#### Use

Hours per Day	24
Days per Week	7
Weeks per Year	50
Annual Hours of Use	8400 Hours
Gross Input BTU/hr	150,000 BTU/hr
Average Input (%)	40% % Input
Average BTU Input	60,000 BTU/hr
Starting Emissions	90 ppm
Pounds/MMCF	115.38 #/MMCF
Pounds per Hour	0.007

**Annual Emissions** **55 # Nox/Year**

#### Modified Source Emissions

Average Input (%)	40% % Input
Average BTU Input	60,000
Starting Emissions	30 ppm
Pounds/MMCF	38.46 #/MMCF
Pounds per Hour	0.002
Annual Emissions	18 # Nox/Year

**Annual Reduced Emissions** **37 # NOx/year**

Annual Tons Reduced	0.018 T/Y Reduced
10 Year Emissions Reduction	0.185

#### Equipment Costs

Burners	\$ 2,000
Engineering	\$ 500
Piping Costs	\$ 250
Installation Costs	\$ 500
Refractory Cost	\$ 250
Start Up Costs	\$ 300
Loss of production	\$ -
Gas Meter & Gages	\$ 2,500
Permit to Construct Fee	\$ 2,051
Source Test	\$ 2,200
<b>Equipment Cost</b>	<b>\$ 10,551</b>

#### Annual Costs

Periodic Maintenance	\$ 500 per year
Source Test 5 years	\$ 2,500 once every 5 years
Cost 10 Year Cost	\$ 5,250
<b>Annual Cost (10 year average)</b>	<b>\$ 525</b>

**DCF Cost Per Ton Reduced** **\$ 80,214**



# ThermJet Burners

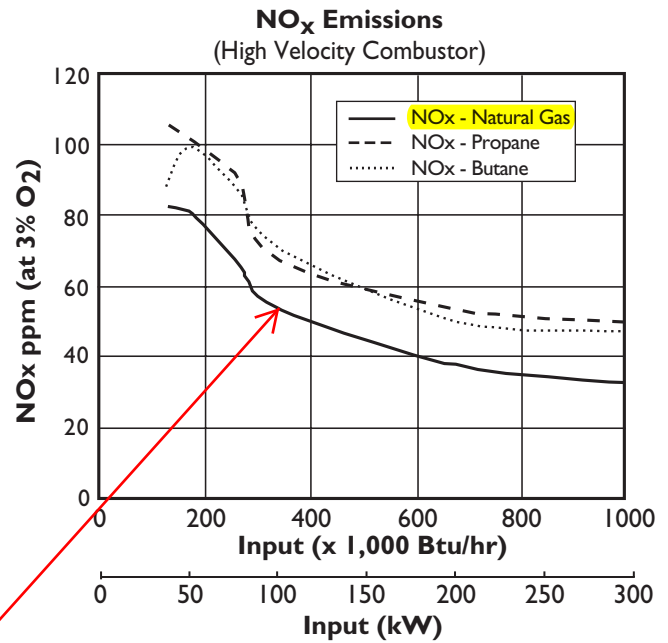
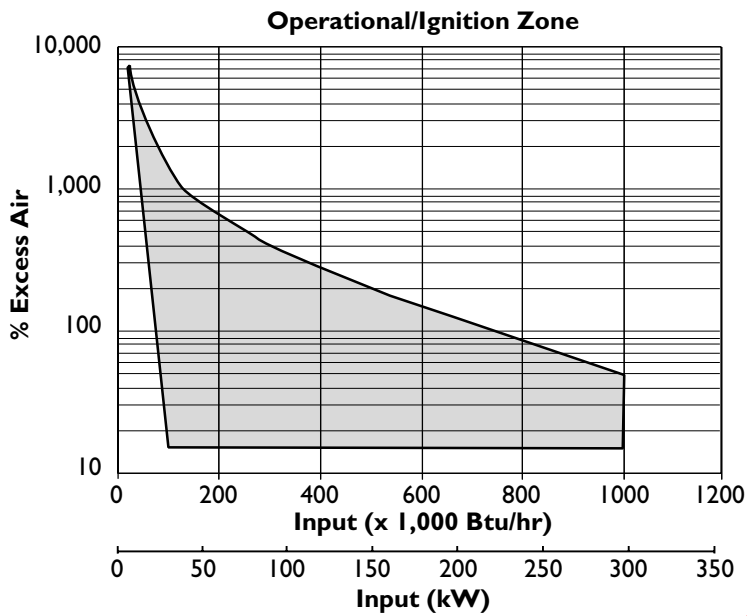
Model TJ0100

Version 2

PARAMETER	BURNER VELOCITY		MODEL TJ0100
Maximum input Btu/hr (kW)	Medium & High Velocity		1,000,000 (293)
Minimum Input, on-ratio Btu/hr (kW)	Medium & High Velocity		100,000 (29)
Minimum Input, fixed air Btu/hr (kW)	Medium & High Velocity		20,000 (6)
Gas inlet pressure required "w.c. (mbar) • Fuel pressure at gas inlet (Tap "B"– see page 3)	High Velocity	Nat. Gas	12.5 (31.0)
		Propane	13.5 (34.0)
		Butane	14.5 (36.0)
	Medium Velocity	Nat. Gas	5.5 (14.0)
		Propane	8.0 (20.0)
		Butane	7.5 (19.0)
Air inlet pressure required "w.c (mbar) • 15% excess air at maximum input (Tap "A" – see page 3)	High Velocity	Nat. Gas	16.5 (41.0)
		Propane	17.0 (43.0)
		Butane	17.0 (43.0)
	Medium Velocity	Nat. Gas	9.0 (23.0)
		Propane	9.0 (23.0)
		Butane	9.0 (23.0)
High Fire Flame Length Inches (mm) (measured from end of combustor)	High Velocity	Nat. Gas	33 (835)
		Propane	34 (865)
		Butane	35 (890)
	Medium Velocity	Nat. Gas	38 (965)
		Propane	37 (940)
		Butane	42 (1065)
Maximum flame velocity ft/s (m/s) • 15% excess air, at maximum input	High Velocity		500 (152.4)
	Medium Velocity		250 (76.2)
Flame detection	U.V. scanner available for all combustors Flame Rod available for use with alloy or silicon carbide combustors only		
Fuel	Natural Gas, Propane, Butane For any other mixed gas, contact Eclipse for orifice sizing.		

- All information is based on laboratory testing in neutral (0.0"w.c.) pressure chamber. Different chamber size and conditions may affect the data.
- All information is based on standard combustor design. Changes in the combustor will alter performance and pressures.
- All inputs based upon gross caloric values.
- Eclipse reserves the right to change the construction and/or configuration of our products at any time without being obliged to adjust earlier supplies accordingly.
- Plumbing of air and gas will affect accuracy of orifice readings. All information is based on generally acceptable air and gas piping practices.

## Performance Graphs



Approximate NO<sub>x</sub> emissions at different firing rates. Note that the operating conditions effect the actual emissions of an application

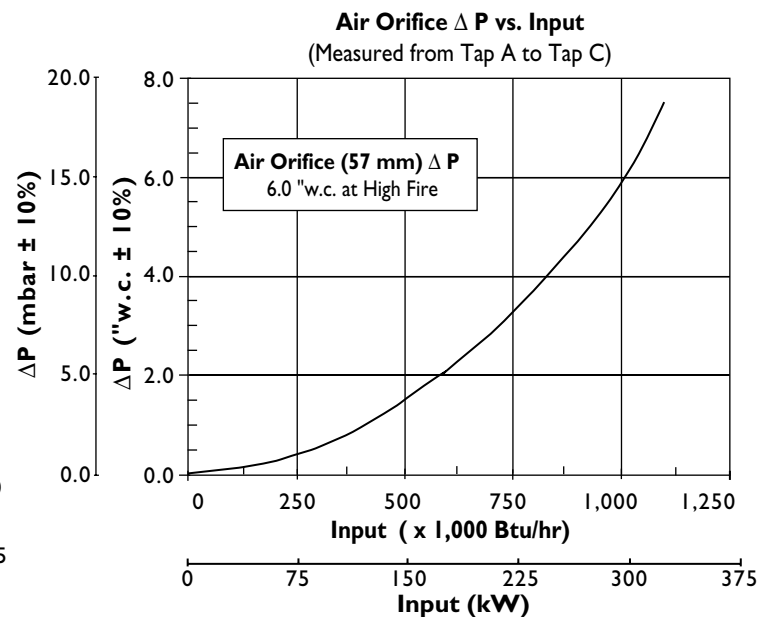
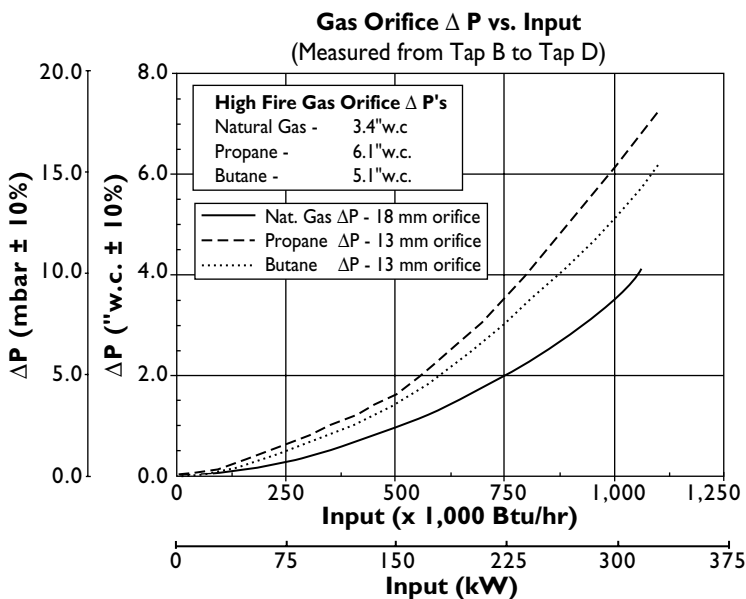


Correction factor for medium velocity combustor is 1.20  
On Ratio: Combustion air is adjusted to 3% O<sub>2</sub> at any given input.

Emissions from the burner are influenced by:

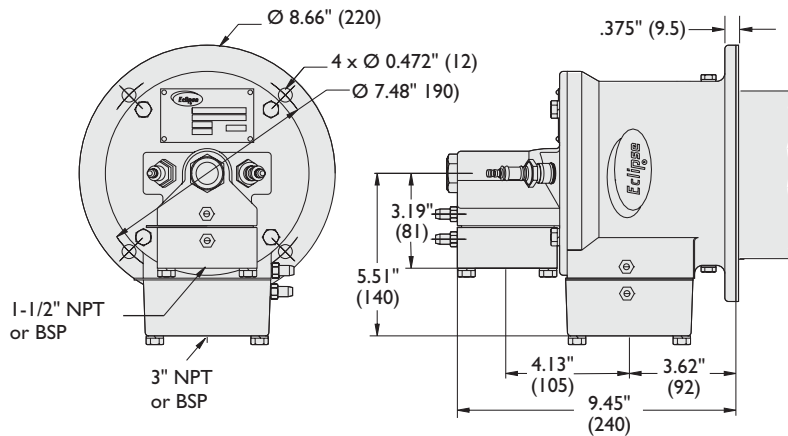
- fuel type
- combustion air temperature
- firing rate
- chamber conditions
- percent of excess air

For estimates of other emissions, contact Eclipse Combustion.



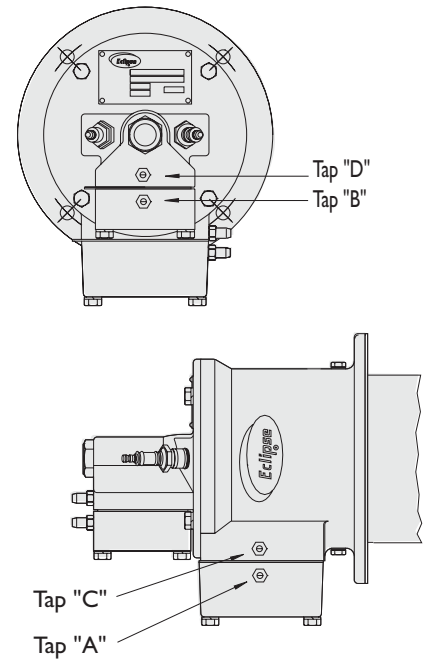
## Dimensions & Specifications Inches (mm)

### Burner Housing



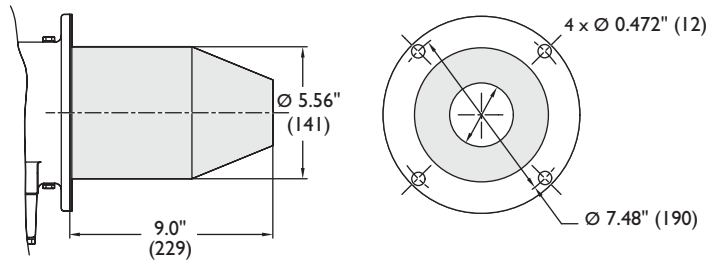
Burner weight less combustor: 42 lb (19 kg)

### Tap Locations



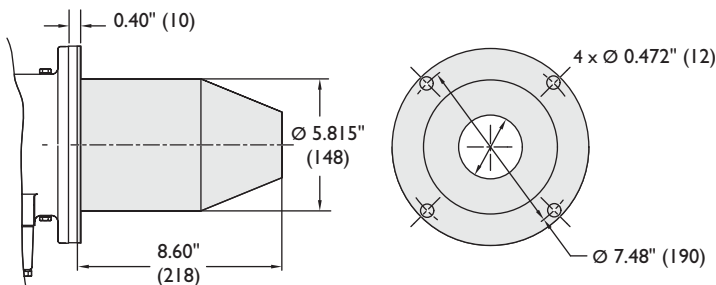
### Combustor

Exhaust outlet diameter : High Velocity :  $\varnothing 2.125$  (54)  
Medium Velocity :  $\varnothing 3.0$  (76.4)



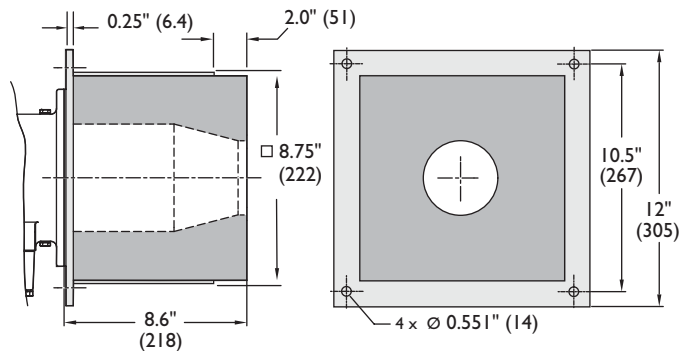
#### Alloy Tube (AISI 310)

Weight: 3.2 lb (1.45 kg)  
Max Chamber Temp: 1,750°F (950°C)



#### Silicon Carbide Tube

Weight: 3.2 lb (1.45 kg)  
Max Chamber Temp: 2,500°F (1371°C)



#### Refractory Block (w/RA330 wrapper)

Weight: 61.3 lb (28 kg)  
Max Chamber Temp: 2,800°F (1538°C)





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AIR QUALITY AND ENERGY EFFICIENCY CONSULTING

## BACT CONSIDERATIONS OF HEAT TREAT FURNACES

**Heat Treat Companies in Southern California:** There are a large number of companies that heat treat products in Southern California. Different heat treat companies have specific metallurgical requirements specified by their customers. Some specialize in only aluminum; while others heat treat small fasteners, yet others concentrate on aerospace alloys. Different furnace designs and methods of firing are required to satisfy those needs. Further, many heat treat companies specialize in very narrow ranges of heat treat capabilities and therefore design custom furnaces that satisfy that requirement. It is not unusual for companies to have one-of-a-kind (proprietary) furnaces used in only one plant.

**Temperature Uniformity:** This term is mentioned in the dialogue above. This is critical to all types of heat treat equipment. The companies who operate these types of furnaces must pass a temperature uniformity survey, typically twice a year at the representative temperatures that the furnaces operate. The uniformity requirements are spelled out in AMS 2750D, AMS H-6875 as well as many other specifications that regulate the industry for aerospace materials and commercial heat treating. Typically the uniformity requirements are dependent upon furnace class and temperature range. For lower temperatures the limit is  $\pm 10^{\circ}\text{F}$ , as the temperatures increase the limit is  $\pm 15^{\circ}\text{F}$ , the upper limits are  $\pm 20^{\circ}\text{F}$  or  $\pm 25^{\circ}\text{F}$  depending upon the specification. A uniformity survey is setup to measure how uniform the temperature is within the working envelope of the furnace. The temperature is measured by placing stands inside the furnace and attaching thermocouples at the representative levels in the furnace. The minimum number of thermocouples is 9 and the maximum is 44, depending on a formula spelled out in the heat treat specification relative to volume of the work zone.

The customers define which specification they must comply. The requirements are very stringent. If a furnace does not pass a uniformity survey they must shut down the furnace and not operate it for heat treating. The heat treaters are audited to assure compliance with the uniformity standards as well as calibration of instruments, etc. Should they not be able to comply with the requirements they are essentially out of business.

BACT guidelines require that to achieve a BACT classification the technology must be specific to a particular type of furnace observed as being continuously successfully operated for a period of 12 months. Once this criterion has been established for a specific type of furnace, the BACT classification remains intact for a period of 2 years.

**Objective:** To provide an understanding of the differentiation of types of heat treat furnaces as associated with BACT requirements. To this end, this paper will define both the basic different types of the heat treat processes as well as the associative furnaces to satisfy the vastly different requirements of the heat treat industry. Furnaces are designed to accomplish a specific task with a specific combustion system. The physical size, configuration and method of firing are all taken



into consideration in the engineering phase of the design process. It must be understood that there is no one NO<sub>x</sub> emission limit that can be ascribed to the industry as a whole or for a specific temperature range or type of furnace within that type. BACT is a condition specific rule.

**Background:** To accurately determine the appropriate BACT for a type or classification of equipment, it is important that one completely understand the depth and breadth of said equipment. It is also important that the “achieved in practice” criteria be established for the specific application rather than an industry as a whole. This is particularly true of heat treating furnaces. The general classification is very expansive in differences of configuration and cannot be painted with the broad brush for all furnaces within that industry. There can be significantly different configurations within the same operating temperature range. It is impossible to determine the appropriate BACT by only looking at heat treating as a single category. There are a large variety of heat treat furnaces. The two basic types are *direct firing* and *indirect firing*. Each of the different types has specific uses and can have dramatically different physical characteristics, combustion systems, furnace temperature, and burner types. This dialogue will articulate the differences in hopes of clarifying the differences.

**Direct Firing** is a process where the products of combustion are in contact with the parts to be heat treated. The materials heat treated in these furnaces are aluminum and carbon steel (where further processing such as machining is required), stainless steels, exotic aerospace alloys, etc. Temperature ranges are typically from 400°F to 2,100°F. Within this category there are a variety of significantly different types of furnaces that satisfy specific metallurgical requirements. The processes are homogenizing (for aluminum), hardening and annealing processes for other alloys. Some of these are air quenched, liquid quenched or slow cooled, depending upon the process.

**Indirect Firing** is used where a controlled atmosphere is required. This atmosphere is an inert gas, which will maintain a non-oxidized surface. There are both high temperature and low temperature applications. Alloys run from the aluminum to exotic alloys (aerospace grades) and carbon steel.

Aluminum alloys must be protected from contact with product of combustion to maintain their bright finish, typical of parts already machined and ready for installation in final assemblies. Temperatures are usually less than 1,000°F and are generally for homogenizing to relax the grain structure after casting or coiling but can also include hardening where rapid quenching is required.

Steel is also annealed much in the same manner as aluminum but the furnaces operate at higher temperatures – up to 1,600°F. There are also indirect fired strip annealing, a continuous process where long coils of stainless or non-ferrous steels are passed through long vertical or horizontal furnaces. These furnaces are very constant in firing rate and run for long periods without being shut down.

As indicated above, within each of the two major categories are sub categories that describe the different furnace configurations; burners and combustions unique to these sub categories.

1. Direct Fired
  - a. Low Temperature Recirculating
  - b. Medium Temperature Recirculating
  - c. High Temperature Direct Fired (ratio, excess air & pulse)

## 2. Indirect Fired

- a. Low Temperature Recirculating (radiant tube, atmosphere)
- b. Medium Temperature Recirculating (bell annealing, atmosphere)
- c. High Temperature Vacuum (gas and electric)
- d. High Temperature, silicone or ceramic tube type
- e. Strip Annealing
- f. Wire Annealing

The following will be an explanation of each type, their uses and differences in operation.

## DIRECT FIRING

**Direct Fired, Low Temperature, Recirculating:** This type of furnace is used typically for temperatures less than 1,000°F where the products of combustion can come in direct contact with the parts to be heat treated. Aluminum homogenizing furnaces fall in this category. Typically there are one to four burners firing into or at one end of a plenum chamber. In the opposite end of the plenum is a large recirculating fan (in some cases multiple fans). These fan(s) provide a high volume heated air to scrub the parts. At low temperatures there is little radiant heat transfer, so the large volumes of air flowing across the parts provide the required convective heat transfer. On the burner end of the chamber there is a duct that comes from the large heat treating chamber of the furnace. The burners fire into a chamber where the products of combustion are mixed with the recirculated air from the furnace proper. The mixture of hot gases and recirculated gases are drawn into a recirculating fan and redirected into the furnace. Typically the volume changes range from 10 to 60 furnace volume changes per minute. With the large amounts of air volumes circulating the actual exhaust from the furnace can contain O<sub>2</sub> concentrations of 10% to 16%.

Even within this type of furnace there are two types of furnace layouts. One has the burner(s) firing into a specific chamber or plenum where the recirculated air is mixed with the products of combustion prior to entering the recirculating fan inlet. This type of furnace is defined as a batch type. Another configuration is that of a continuous nature that utilizes a conveyor to move parts through the furnace. The conveyor type is frequently used for lower temperature applications starting as low as 425°F, however there are conveyorized furnaces that can run up to about 1700°F. Within this category there are two types of firing scenarios. One is an excess air method of firing and the other is using a recirculating fan method. Generally speaking, the lower the operating temperature the lower the NO<sub>x</sub> values.

In all cases the firing rate is modulated to maintain the temperature in the heating chamber. In this type of furnace the combustion systems are usually (but not always) ratio based. The ratio however tends to be biased to the excess air side of the stoichiometric ratio. There are some older types of combustion systems that utilize an excess air only type of firing. NO<sub>x</sub> levels are usually relatively low in this type of furnace, again depending upon furnace configuration and temperature of operation.

**Medium Temperature Recirculating:** These furnaces are used for steel or alloy heat treating. Temperature ranges are up to approximately 1,700°F. Some of these are continuous conveyorized and others are box batch type. Due to the limitations of recirculating fans, direct firing is used for higher temperature. In this category, usually a single burner configuration is

utilized. Many of these furnaces do not have specific flues. The exhaust (products of combustion) exits from the entrance and exit end of the furnace.

**High Temperature Direct Fired (ratio, excess air & pulse):** This category is used for heat treating a variety of different alloys up to 2100°F. It should be noted that these furnaces are usually very flexible in temperature and many times operate as low as 900°F. It should be remembered that temperature uniformity is critical to effective heat treating metallurgy. The combustion systems are multi burner systems that can use as many as three distinctive different methods of firing, ratio, excess air and pulse firing. In some cases, more than one mode of operating is incorporated in the same furnace, usually ratio and excess air.

The different modes of operation are used at different temperatures with the ultimate goal to maintain maximum temperature uniformity to satisfy metallurgical requirements. *Ratio systems* operate by modulating air and the gas is modulated based on air pressure feed to a gas ratio regulator. The correct air/fuel ratio is thereby maintained through the firing rate, this type of system is usually only used at higher temperature. *Excess air* is where the air flow rate is maintained at the maximum and the gas is modulated. This method is used when very tight temperature uniformity is required. *Ratio firing* will typically not yield tight enough uniformity for lower temperatures or critical jobs. The third method of firing is *pulse firing* where the burners are fired on ratio at 100%, but pulsed on and off (or high fire/low fire operation) with the quantity of burners and duration of on/off cycles determined by the temperature requirements of the parts being heat treated. Even this type of system may need some amounts of excess air to achieve desired temperature uniformity. NOx levels vary depending upon burner types, temperatures, air fuel ratio, firing rate and firing method. Needless to say a furnace operating at 900°F is going to have a much lower NOx level than the same furnace operating at 2100°F. Many of the direct fired furnaces utilize high velocity burners to help achieve the high degrees of temperature uniformity required in the lower temperature ranges. The exit velocity of these burners can be as high as 300 miles per hour.

**Direct Fired NOx Considerations:** As with all categories of heat treat furnaces and processes, the NOx values are wide ranging. Lower temperatures usually yield lower NOx values; higher temperatures yield higher NOx values. Multiple use furnaces operating from 900°F to 2100°F will have different NOx values depending on firing rate, mode of operation, burner type and temperature. The indirect fired recirculating type can generally yield the lowest NOx values (when operating at lower temperatures), the direct fired – the highest NOx values. With that in mind, the NOx values could be from in the 30 ppm range to 60 ppm range at high fire depending upon variables of configuration. On high turn down the NOx ppm values may be as high as 80 ppm, as evidenced by reviewing burner manufacturers published NOx curves.

## INDIRECT FIRED FURNACES

**Indirect Fired – Recirculating Radiant Tube:** Within this type of furnace there are many different types of indirect fired heat treat furnaces – *low temperature radiant tube, medium temperature radiant tube, bell annealing, high temperature radiant tube, continuous strip annealing and wire annealing.*

**Low Temperature Radiant Tube:** The radiant tube type has multiple burners that fire into individual isolated tubes and is operated usually at less than 1,000°F. These tubes are normally

in a “U” shape firing into one end and exhausting from the other end. By design, the flames are usually quite long extending half the length of the tube (in a “U” tube – to the bend). If the total tube length is 16’, the flame length will be approximately 8’ long. The burners are normally pulse fired with the duration of the on/off cycles determined by the demand for heat. If continuously fired on a modulating cycle, the burner could cause excessive temperature in the tube closest to the burner, causing premature failure to the radiant tube. The tube extends into the heating chamber using radiant heat to transfer heat to the chamber. There is normally a large propeller type of fan that circulates the air across the parts and around the radiant tubes. Normally, there is an inert gas that is introduced into the heating chamber to prevent oxidization of the surface of the metal being heat treated. This type of furnace usually has multiple low BTU (perhaps in the .5 MMBTU/hr range) burners firing into individual radiant tubes. In the previous example the burner, a single large burner (up to >3 MMBTU/hr) fires directly into the firing chamber. In this type of furnace, there may be a metallurgical necessity to purge the working zone of the furnace with an inert gas. This inert gas protects the parts to be heat treated from becoming discolored, particularly important with aluminum where a bright finish is required. In other cases inert gas may not be required, in which case only hot air is recirculated within the furnace – still without products of combustion in direct contact with the parts being heat treated.

**Medium Temperature Bell Annealing** is another type of indirect fired heat treat furnace. Normally, this furnace operates at higher temperatures, up to 1,500°F, and usually used for annealing steel parts or steel coils. These furnaces are configured quite differently than the radiant tube type of furnace. There is a large bell made of stainless steel that fits over the parts to be annealed. As in the previous case the parts are isolated from the products of combustion but in a dramatically different way. The parts are not aluminum, but share the necessity of not having the products of combustion in direct contact with the parts being annealed. Steel coils are the type of part that requires this type of annealing. The annealing relaxes the stresses introduced into coils when rolling to a precision cross section or slitting to specific widths. Annealing in an inert atmosphere, maintains a bright surface compared to an oxidized (rusted) surface that would occur if the products of combustion were in direct contact with the coils. In this type of furnace there are also fans that recirculate the heated inert gas around the coils to assure the required temperature uniformity while transferring the heat energy from the outside of the bell to the parts contained therein. The coils usually being sold to companies that stamp the coils into finished parts that go into thousands of different parts.

In bell annealing furnaces there are two types of burners used – forward velocity fired tangentially around the large bell and flat flame burners firing directly toward the bells. It is important to note that these burner configurations are specifically designed for a particular furnace configuration, and are not interchangeable. Typically, similar burners can also be used in direct-fired high temperature heat treat furnaces. Whereas, the radiant tube burners can only be used in radiant tubes. This is because there is a need for the flame to extend as far into the tube as possible (usually half the length of the tube or to the bend). These burners cannot be used for any other applications.

**Vacuum:** There are two types of vacuum heat treat furnaces, electric and gas fired. Obviously, the electric heat treat vacuum generates no NOx emissions. The gas fired vacuum furnaces are a rarity. Due to the low BTU input they are exempt from permitting requirements per Rule 219(b)(2).

**High Temperature Radiant Tube:** These furnaces typically use silicone carbide or ceramic tubes to transfer the heat to the load. These can operate over 2000°F. Typically, they are not “U” tube configuration but straight through due to the nature of the material used and the furnace configuration. Many of these furnaces are relatively small and would therefore be exempt per Rule 219(b)(2).

**Wire Annealing Furnaces:** These furnaces are again unique compared to other types of heat treat furnaces. The wire to be annealed is pulled through the furnace heating zone in many strands. The wire comes off of coils of wire and is taken up on coils. The wire is continuously moving through the furnace and has heating and cooling zones of the furnace. Most of these have an inert gas in contact with the wire in the heating zone and are radiant tube fired not dissimilar to other types of radiant tube furnaces. However, the operation is significantly different from other types of radiant tube fired furnaces.

**Salt Bath and Fluidized Bed Furnaces:** The salt bath type uses salt that is heated with an emersion heater. This is a tube fired burner that heats up a tube that transfers the heat to a salt. The salt becomes molten and when at the proper temperature the parts are placed in a basket and immersed in the liquid salt bath. After a given time the parts are removed and quenched or allowed to air cool. Fluidized bed furnaces have a fluidized bed of material where the heat is directed through a media. The parts are placed in the media and heated to the representative temperature. Generally these have small BTU input but could possibly be over 2 MMBTU/hr.

There are many other types of small heat treat furnaces that have inputs less than 2 MMBTU/hr and are thus also exempt pursuant to Rule 219(b)(2).

**Indirect Firing NOx Considerations:** In this indirect firing group of heat treat furnaces, the lowest NOx levels are achieved in the Bell Annealing type of furnace, operating in the 45 – 70 ppm range. However, as is true of heat treat furnaces the NOx levels are dependent upon the furnace temperature, combustion system and furnace configuration. Condition dependent, is the operative word.

The *radiant tube* types of burners generate the highest emissions from a ppmv NOx point of view, typically over 70 ppm, again depending upon the furnace configuration and temperature of operation. This is primarily due to the nature of pulse firing of radiant tube firing where the flame is designed to travel approximately 50% of the tube length. However, once the parts are up to temperature, the total NOx (pounds per hour) are usually reasonably low compared to the direct-fired furnaces. This is because, once up to temperature, there is a relatively low energy input to maintain temperature. There are new technologies that have come out that can lower the NOx values to less than 60 ppm. However they may not be acceptable for every type of radiant tube firing.

**Conclusion:** In general, the NOx emissions are determined by a combination of factors: burner type, furnace temperature, combustion system operational system, and furnace configuration. The two different issues are total NOx and ppmv NOx. Even within this type of furnace and burner types there are variables. Total NOx would be the pounds per hour emissions vs. the ppm values, which are an instantaneous value. Virtually all heat treat operations involve a ramping to temperature and a soaking of the material at temperature. There is ramped heating that takes

place over many hours and then a soak period that can take longer than 8 hours at temperature. Frequently, once the set point temperature is reached, a relative small input is required to maintain temperature. So for some types of furnaces, the ppm value may be higher but the average firing rate may be relatively low. Thus the overall pounds of NOx emitted into the atmosphere is lower at average firing rates than it is at maximum firing rates with a lower ppm value.

**Summary:** By a review of the above, one can see that there are a large number of different types of heat treat furnaces – each with its own combustion system and NOx consideration. Even within a specific type of heat treat furnace there are significant numbers of different furnace configurations. Generally there are no standard part number furnaces defined by a manufacturer. Most are custom made for a specific customer, conducting a specific type of heat treating in his facility. Within a given facility there may be more than 6 different configurations of furnace, each type with different burners, controls and operating conditions. These were originally designed to provide a specific heating and uniformity profile. In many cases the burners and combustion systems are not interchangeable from one furnace to another.

Overall, to determine NOx BACT for a particular furnace type one must consider the combination of issues relating to the furnace configuration, burner selection, operating temperature and combustion system firing methodology. We also must understand that the same burners operated under different furnace configuration and temperatures will yield different NOx values and still will be BACT for that specific furnace type.

As it can be seen heat treating is not a one size fits all industry similar to boilers of other types of industries where the process remains relatively constant from company-to-company and job-to-job, furnace to furnace. Many custom built furnaces answer very specific metallurgical requirements that are completely unique to one company, and perhaps only one or two furnaces of that configuration are in existence. For this reason the SCAQMD must evaluate heat treat furnaces on an individual basis - not lumped into a general category. In fact BACT for the heat treating industry could vary from 30 ppm in NOx ppm values to as high as 80 ppm and will still be BACT acceptable, based on furnace type, temperature, firing rate and operating configuration.

## ATTACHMENT H

### SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

**Final Subsequent Environmental Assessment to the December 2008 Final Environmental Assessment for Proposed Rule 1147 – NO<sub>x</sub> Reductions from Miscellaneous Sources, and to the September 2011 Final Subsequent Environmental Assessment for Proposed Amended Rule 1147 – NO<sub>x</sub> Reductions from Miscellaneous Sources**

**May 2017**

**SCAQMD No. 03172017SW**

**State Clearinghouse No: 2009061088**

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**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
GOVERNING BOARD**

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Speaker of the Assembly Appointee

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## PREFACE

This document constitutes the Final Subsequent Environmental Assessment (SEA) for Proposed Amended Rule (PAR) 1147 - NO<sub>x</sub> Reductions From Miscellaneous Sources. SCAQMD prepared a Notice of Preparation/Initial Study (NOP/IS) which identified environmental topics to be analyzed in a Draft Environmental Assessment (EA). Since PAR 1147 was identified in the NOP/IS as potentially having statewide, regional or areawide significance, a CEQA scoping meeting was held at the SCAQMD's Headquarters in conjunction with the Public Workshop on February 15, 2017. The NOP/IS was distributed to responsible agencies and interested parties for a 30-day review and comment period from February 1, 2017, to March 3, 2017. SCAQMD received two comment letters relative to the NOP/IS. The comments made at the CEQA scoping meeting and the responses to these comments are included in Appendix D of this Final SEA. The comment letters received relative to the NOP/IS and the responses to the comments are included in Appendix E of this Final SEA.

Following the release of the NOP/IS, further analysis of the proposed project indicated that the type of CEQA document appropriate for the proposed project is a SEA. A Draft SEA was prepared and was then released for a 46-day public review and comment period from March 24, 2017 to May 9, 2017. Analysis of PAR 1147 in the Draft SEA identified the topic of operational air quality as the only area that may be significantly adversely affected by the proposed project. Further analysis of this environmental area in the Draft SEA has confirmed that operational air quality emissions associated with implementing PAR 1147 will exceed the SCAQMD's significance operational threshold for NO<sub>x</sub>. PAR 1147 did not result in the identification of any other environmental topic areas that would be significantly adversely affected. Four alternatives to the proposed project were analyzed in the Draft SEA. When comparing the environmental effects of the project alternatives with the proposed project and evaluating the effectiveness of achieving the project objectives of the proposed project versus the project alternatives, the proposed project provides the best balance in achieving the project objectives while minimizing the significant adverse environmental impacts to operational air quality. Two comment letters were received from the public regarding the analysis in the Draft SEA. The comment letters received relative to the Draft SEA and responses to individual comments are included in Appendix F of this document.

In addition, subsequent to release of the Draft EA, modifications were made to PAR 1147 and some of the revisions were made in response to verbal and written comments received. To facilitate identification, modifications to the document are included as underlined text and text removed from the document is indicated by ~~strikethrough~~. To avoid confusion, minor formatting changes are not shown in underline or strikethrough mode.

Staff has reviewed the modifications to PAR 1147 and concluded that none of the revisions constitute: 1) significant new information; 2) a substantial increase in the severity of an environmental impact; or, 3) provide new information of substantial importance relative to the draft document. In addition, revisions to the proposed project in response to verbal or written comments would not create new, avoidable significant effects. As a result, these revisions do not require recirculation of the document pursuant to CEQA Guidelines § 15088.5. Therefore, this document now constitutes the Final SEA for PAR 1147.

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## **CHAPTER 1**

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### **EXECUTIVE SUMMARY**

**Introduction**

**California Environmental Quality Act (CEQA)**

**Previous CEQA Documentation for Rule 1147**

**Intended Uses of this Document**

**Areas of Controversy**

**Executive Summary**

## INTRODUCTION

The California Legislature created the South Coast Air Quality Management District (SCAQMD) in 1977<sup>1</sup> as the agency responsible for developing and enforcing air pollution control rules and regulations in the South Coast Air Basin (Basin) and portions of the Salton Sea Air Basin and Mojave Desert Air Basin. In 1977, amendments to the federal Clean Air Act (CAA) included requirements for submitting State Implementation Plans (SIPs) for nonattainment areas that fail to meet all federal ambient air quality standards (CAA § 172) and similar requirements exist in state law (Health and Safety Code § 40462). The federal CAA was amended in 1990 to specify attainment dates and SIP requirements for ozone, carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>) and particulate matter with an aerodynamic diameter of less than 10 microns (PM<sub>10</sub>). In 1997, the United States Environmental Protection Agency (U.S. EPA) promulgated ambient air quality standards for particulate matter with an aerodynamic diameter less than 2.5 microns (PM<sub>2.5</sub>). The California Clean Air Act (CCAA), adopted in 1988, requires the SCAQMD to achieve and maintain state ambient air quality standards for ozone, CO, sulfur dioxide (SO<sub>2</sub>), and NO<sub>2</sub> by the earliest practicable date (Health and Safety Code § 40910). The CCAA also requires a three-year plan review, and, if necessary, an update to the SIP. The U.S. EPA is required to periodically update the national ambient air quality standards (NAAQS).

By statute, the SCAQMD is required to adopt an air quality management plan (AQMP) demonstrating compliance with all federal and state ambient air quality standards for the areas within SCAQMD jurisdiction<sup>2</sup>. Furthermore, the SCAQMD must adopt rules and regulations that carry out the AQMP<sup>3</sup>. The AQMP is a regional blueprint for how the SCAQMD will achieve air quality standards and healthful air and the Draft Final 2016 AQMP<sup>4</sup> contains multiple goals promoting reductions of criteria air pollutants, greenhouse gases, and toxics. The 2016 AQMP was adopted by the SCAQMD Governing Board on March 3, 2017.

The Basin, which includes all of Orange County and the non-desert portions of Los Angeles, San Bernardino and Riverside counties, has one of the worst air quality problems in the nation. Though there have been significant improvements in air quality in the Basin over the last two decades, some ambient air quality standards are still exceeded relatively frequently and by a wide margin. The 2012 AQMP, submitted to the California Air Resources Board (CARB) for SIP inclusion in December 2012, concluded that further reductions in PM<sub>2.5</sub> and oxides of nitrogen (NO<sub>x</sub>) emissions would be necessary to attain the air quality standards for 24-hour PM<sub>2.5</sub> and 8-hour ozone by the dates mandated by federal law. Less emphasis was placed on achieving emission reductions of volatile organic compounds (VOCs) because NO<sub>x</sub> emission reductions have a greater co-benefit of also reducing ozone, and PM<sub>2.5</sub> formation. Ozone, a criteria pollutant that has been

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<sup>1</sup> The Lewis-Presley Air Quality Management Act, 1976 Cal. Stats., ch. 324 (codified at Health and Safety Code §§ 40400-40540).

<sup>2</sup> Health and Safety Code § 40460(a).

<sup>3</sup> Health and Safety Code § 40440(a).

<sup>4</sup> SCAQMD, Draft Final 2016 Air Quality Management Plan. [http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/draft-final-aqmp/clean/2016finaldraftaqmpdec2016\(clean\).pdf](http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/draft-final-aqmp/clean/2016finaldraftaqmpdec2016(clean).pdf)

shown to adversely affect human health, is formed when VOCs react with NO<sub>x</sub> in the atmosphere. NO<sub>x</sub> is a precursor to the formation of ozone and PM<sub>2.5</sub>.

Rule 1147 - NO<sub>x</sub> Reductions From Miscellaneous Sources, was adopted on December 5, 2008 to control NO<sub>x</sub> emissions from miscellaneous gas and liquid fuel fired combustion equipment, including, but not limited to: ovens, dryers, dehydrators, heaters, kilns, calciners, furnaces, heated pots, cookers, roasters, fryers, closed and open heated tanks and evaporators, distillation units, degassing units, incinerators, and soil remediation units. Rule 1147 required new, modified, relocated and in-use combustion equipment to comply with equipment-specific NO<sub>x</sub> emission limits. For in-use equipment, compliance dates for emission limits were based on the date of equipment manufacture, and emission limits went into effect for older equipment first. Owners of equipment were provided at least 15 years before existing equipment would need to be modified or replaced in order to meet the emission limits. Rule 1147 also contained test methods and provided alternate compliance options, including a process for certifying NO<sub>x</sub> emissions through an approved testing program. Other requirements included equipment maintenance, fuel and time meters and recordkeeping.

Rule 1147 was later amended on September 9, 2011 to: 1) delay implementation dates by up to two years; 2) remove a requirement for fuel or time meters; and 3) provide compliance flexibility for small and large sources. In addition, the amendments included a requirement for a technology assessment to be conducted on the availability of low NO<sub>x</sub> burner systems for processes with NO<sub>x</sub> emissions of one pound per day or less that are not typically subject to a BACT requirement as new sources. The technology assessment was completed and included an evaluation of cost and cost effectiveness for small and low emission sources. The technology assessment was reviewed by a third party consultant. As a result, Proposed Amended Rule (PAR) 1147 has been developed to address the recommendations provided by the third party consultant. In addition, PAR 1147 also contains elements to address recommendations proposed by staff (that were separate from the consultant's review) in order to resolve certain stakeholders' compliance issues.

Businesses have expressed concern regarding the cost effectiveness of complying with the rule requirements for small and low emission sources (less than 1 pound per day of NO<sub>x</sub>). In addition, a technology assessment conducted by staff for these small sources indicates that emission limits should be changed for certain specific applications based on technical feasibility and burner availability. SCAQMD staff estimates that 4,900 to 5,650 out of 6,400 units and up to 3,900 facilities would benefit from delayed compliance requirements and the exemptions proposed in PAR 1147. As many as 3,400 spray booths used in manufacturing, equipment repair and maintenance, and auto body repair will benefit from the proposed amendments.

## **CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)**

The California Environmental Quality Act (CEQA), Public Resources Code Section 21000 *et seq.*, requires environmental impacts of proposed projects to be evaluated and feasible methods to reduce, avoid or eliminate significant adverse impacts of these projects to be identified and implemented. The lead agency is the "public agency that has the principal responsibility for carrying out or approving a project that may have a significant effect upon the environment"

(Public Resources Code § 21067). Since the SCAQMD has the primary responsibility for supervising or approving the entire project as a whole, which is a proposed SCAQMD rule, it is the most appropriate public agency to act as lead agency (CEQA Guidelines<sup>5</sup> § 15051(b)).

PAR 1147 is considered a “project” as defined by CEQA. CEQA requires that all potential adverse environmental impacts of proposed projects be evaluated and that methods to reduce or avoid identified significant adverse environmental impacts of these projects be implemented if feasible. The purpose of the CEQA process is to inform the SCAQMD Governing Board, public agencies, and interested parties of potential adverse environmental impacts that could result from implementing the proposed project and to identify feasible mitigation measures or alternatives, when an impact is significant.

Public Resources Code Section 21080.5 allows public agencies with regulatory programs to prepare a plan or other written documents in lieu of an environmental impact report once the secretary of the resources agency has certified the regulatory program. The SCAQMD's regulatory program was certified by the secretary of resources agency on March 1, 1989, and has been adopted as SCAQMD Rule 110 – Rule Adoption Procedures to Assure Protection and Enhancement of the Environment. Pursuant to Rule 110 (the rule which implements the SCAQMD's certified regulatory program), SCAQMD prepared a Notice of Preparation/Initial Study (NOP/IS) which identified environmental topics to be analyzed in a Draft Environmental Assessment (EA). Since PAR 1147 was identified in the NOP/IS as potentially having statewide, regional or areawide significance, a CEQA scoping meeting is required (pursuant to Public Resources Code Section 21083.9(a)(2)) and was held at the SCAQMD's Headquarters in conjunction with the Public Workshop on February 15, 2017.

The NOP/IS provided information about the proposed project to other public agencies and interested parties prior to the intended release of the Draft EA. The NOP/IS was distributed to responsible agencies and interested parties for a 30-day review and comment period from February 1, 2017, to March 3, 2017. The initial evaluation in the NOP/IS identified the topic of operational air quality as potentially having potentially significant adverse impacts requiring further review. During the public comment period, the SCAQMD received two comment letters relative to the NOP/IS.

Following the release of the NOP/IS, further analysis of the proposed project indicated that the type of CEQA document appropriate for the proposed project is a Subsequent Environmental Assessment (SEA), in lieu of an EA. The SEA is a substitute CEQA document, prepared in lieu of a Subsequent EIR (CEQA Guidelines § 15162(b)), pursuant to the SCAQMD's Certified Regulatory Program (CEQA Guidelines § 15251(l); codified in SCAQMD Rule 110). Therefore, a SEA is appropriate because new information of substantial importance, which was not known and could not have been known at the time the Final EA was certified for the adoption of Rule 1147 in December 2008 (referred to herein at the December 2008 Final EA) and the Final Subsequent EA that was certified for the amendments to Rule 1147 in September 2011 (referred

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<sup>5</sup> The CEQA Guidelines are codified at Title 14 California Code of Regulations § 15000 *et seq.*

to herein as the September 2011 Final SEA), became available (CEQA Guidelines § 15162(a)(3)). Further, PAR 1147 is expected to have significant effects that were not discussed in the previous December 2008 Final EA or September 2011 Final SEA (CEQA Guidelines § 15162(a)(3)(A)). In the event that new information becomes available that would change a project, the lead agency shall prepare a subsequent Environmental Impact Report (EIR) (CEQA Guidelines § 15162(b)). However, under SCAQMD's certified regulatory program, an equivalent document, a subsequent EA, can be a substitute for preparing a subsequent EIR.

The SEA is also a public disclosure document intended to: 1) provide the lead agency, responsible agencies, decision makers and the general public with information on the environmental impacts of the proposed project; and 2) be used as a tool by decision makers to facilitate decision making on the proposed project.

Thus, the SCAQMD, as lead agency for the proposed project, has prepared the Draft SEA pursuant to its Certified Regulatory Program. The Draft SEA identified and analyzed the topic of operational air quality as the only area that may have significant adverse impacts if the proposed project is implemented. The Draft SEA concluded that only the topic of operational air quality emission impacts would have significant adverse impacts. Because PAR 1147 may have statewide, regional or areawide significance, a CEQA scoping meeting was required for the proposed project pursuant to Public Resources Code § 21083.9(a)(2) and was held at the SCAQMD's Headquarters in conjunction with the Public Workshop on February 15, 2017. Further, pursuant to CEQA Guidelines § 15252, since significant adverse impacts were identified, an alternatives analysis and mitigation measures are required.

The Draft SEA ~~is being~~<sup>was</sup> released for a 46-day public review and comment period from March 24, 2017 to May 9, 2017. The comments made at the CEQA scoping meeting and the responses to these comments are included in Appendix D of this Final SEA. The comment letters received relative to the NOP/IS and the responses to the comments are included in Appendix E of this Final SEA. In addition, all comments received during the public comment period on the analysis presented in the Draft SEA have ~~will~~ been responded to and included in ~~an~~ Appendix F to of the Final SEA.

Subsequent to release of the Draft SEA, modifications were made to PAR 1147 and some of the revisions were made in response to verbal and written comments on the project's effects. At the time the Draft SEA was released for public review and comment, the estimate of total NOx emission reductions foregone of 0.9 ton per day included the portion of emission reductions foregone attributable to the original proposal to increase the NOx compliance limit for low temperature ovens and other units with a heat rating less than 325,000 BTU per hour until 2044. However, subsequent to the release of the Draft SEA, the proposed project was modified to fully exempt all units, not just low temperature units, in this category. The effect of exempting these units is now expected to have permanent, instead of temporary, NOx emission reductions foregone of approximately 49 pounds per day, which is less than the NOx significance threshold of 55 pounds per day. Staff has reviewed the modifications to PAR 1147 and concluded that none of the modifications constitute significant new information or a substantial increase in the severity of an environmental impact, nor provide new information of substantial importance relative to the



draft document. In addition, revisions to PAR 1147 in response to verbal or written comments would not create new, avoidable significant effects. As a result, these revisions do not require recirculation of the Draft SEA pursuant to CEQA Guidelines § 15088.5.

Prior to making a decision on the adoption of PAR 1147, the SCAQMD Governing Board must review and certify the Final SEA, including responses to comments, as providing adequate information on the potential adverse environmental impacts that may occur as a result of adopting PAR 1147.

## **PREVIOUS CEQA DOCUMENTATION FOR RULE 1147**

This Final SEA is a comprehensive environmental document that analyzes potential environmental impacts from PAR 1147. SCAQMD rules, as ongoing regulatory programs, have the potential to be revised over time due to a variety of factors (e.g., regulatory decisions by other agencies, new data, and lack of progress in advancing the effectiveness of control technologies to comply with requirements in technology forcing rules, etc.). Rule 1147 was adopted in December 2008 and amended in September 2011. An environmental analysis was prepared for each of these regulatory actions. In addition, as part of the currently proposed amendments to Rule 1147, the SCAQMD prepared a NOP/IS and the initial evaluation identified the topic of operational air quality as potentially having potentially significant adverse impacts requiring further review. The conclusion in the NOP/IS is consistent with the conclusions reached in the previously certified documents (also described in this section) that aside from the topic of operational air quality, there would be no other significant adverse effects from implementing PAR 1147.

The following summarizes the previously prepared CEQA documents for Rule 1147 in reverse chronological order and is included for informational purposes. These documents are available for downloading from the SCAQMD's website via the links immediately following the summaries. In addition, hardcopies of these CEQA documents can be obtained by contacting Fabian Wesson, Public Advisor at the SCAQMD's Public Information Center by phone at (909) 396-2688 or by email at [PICrequests@aqmd.gov](mailto:PICrequests@aqmd.gov).

### **Notice of Preparation/Initial Study for Proposed Amended Rule 1147 (February 2017)**

NOP/IS for Proposed Amended Rule 1147 – NO<sub>x</sub> Reductions from Miscellaneous Sources, February 2017 (SCAQMD No. 01312016SW; State Clearinghouse No. 2009061088), SCAQMD staff is proposing to amend Rule 1147 in order to resolve Rule 1147 compliance issues that have been raised by stakeholders. If adopted, PAR 1147 would: 1) change the NO<sub>x</sub> emission limit for low temperature (<1,200 degrees Fahrenheit, °F) ovens and other units with a heat input rating of less than 325,000 BTU/hour from 30 parts per million (ppm) to 60 ppm; 2) change the NO<sub>x</sub> emission limit for low temperature afterburners, burn-off ovens, incinerators, and related equipment from 30 ppm to 60 ppm; 3) change the compliance date for small in-use units (with NO<sub>x</sub> emissions of one pound per day or less) from a schedule based on a 20 year lifetime to a 35 year lifetime or until the units are replaced, retrofit or relocated; 4) change the compliance date for heated process tanks from a schedule based on a 15 year to 20 year lifetime to when the units are replaced, retrofit or relocated; 5) add a testing exemption for ultra-low NO<sub>x</sub> infrared burners; 6) clarify an exemption for food ovens; and 7) clarify an exemption for flare type systems. Some facilities that may be affected by PAR 1147 are identified on lists compiled by the California

Department of Toxic Substances Control per California Government Code § 65962.5. SCAQMD as Lead Agency prepared this NOP/IS for the proposed project. The initial evaluation in the NOP/IS identified the topic of air quality as potentially being adversely affected by the proposed project: If implemented, PAR 1147 is expected to result in NO<sub>x</sub> emission reductions foregone of up to 0.9 ton per day in 2017. However, the emission reductions foregone will be eventually recaptured because the existing units will be regularly replaced and upgraded over time.

The NOP/IS for PAR 1147 was released for a 30-day public review and comment period from February 1, 2017 to March 3, 2017. Two comment letters were received during this comment period. Also, because PAR 1147 may have statewide, regional or areawide significance, a CEQA scoping meeting was required for the proposed project pursuant to Public Resources Code § 21083.9(a)(2) and was held at the SCAQMD's Headquarters in conjunction with the Public Workshop on February 15, 2017. Of the comments received on the NOP/IS and at the CEQA scoping meetings, none of the comments changed the conclusions. This document can be obtained by visiting the following website at:

[http://www.aqmd.gov/docs/default-source/ceqa/documents/aqmd-projects/2016/par1147\\_nopis.pdf](http://www.aqmd.gov/docs/default-source/ceqa/documents/aqmd-projects/2016/par1147_nopis.pdf)

### **Final Subsequent Environmental Assessment for Proposed Amended Rule 1147 (September 2011)**

Final SEA for Proposed Amended Rule 1147 – NO<sub>x</sub> Reductions from Miscellaneous Sources; September 2011 (SCAQMD No. 02012011BAR; State Clearinghouse No. 2011011088): PAR 1147 was adopted to respond to compliance challenges experienced by certain affected sources that would: 1) remove the requirements for installation of time meters; 2) remove the requirements for installation of non-resettable totalizing fuel meters if the operator intends to comply with the Rule 1147 NO<sub>x</sub> emission limits in terms of parts per million (ppm); and; 3) extend deadlines for demonstrating compliance with the early phases (2010/2011) for NO<sub>x</sub> emission limits by up to two years. Other minor changes were proposed for clarity and consistency throughout the rule. The September 2011 Final SEA concluded that the adoption of PAR 1147 would only generate significant adverse impacts for the topic of air quality. The September 2011 Final SEA was certified by the SCAQMD Governing Board on September 9, 2011. This document can be obtained by visiting the following website at:

<http://www.aqmd.gov/docs/default-source/ceqa/documents/aqmd-projects/2011/final-subsequent-environmental-assessment-for-proposed-amended-rule-1147.pdf>

### **Final Environmental Assessment (EA) for Proposed Rule 1147 (December 2008)**

Final EA for Proposed Rule 1147 – NO<sub>x</sub> Reductions from Miscellaneous Sources; December 2008 (SCAQMD No. 081015JJI; State Clearinghouse No. 2008101082): Rule 1147 was adopted to implement 2007 AQMP control measures CMB-01 (NO<sub>x</sub> Reductions from Non-RECLAIM Ovens, Dryers, and Furnaces) and MCS-01 (Facility Modernization) to achieve NO<sub>x</sub> reductions from miscellaneous gas and liquid fuel fired combustion equipment, including, but not limited to: ovens, dryers, dehydrators, heaters, kilns, calciners, furnaces, heated pots, cookers, roasters, fryers, closed and open heated tanks and evaporators, distillation units, degassing units, incinerators, and soil remediation units. At the time of adoption, Rule 1147 was estimated to reduce annual average

emissions of NO<sub>x</sub> by 3.5 tons per day by 2014 and 3.8 tons per day by 2023. A Draft EA for the adoption of Rule 1147 was released for a 30-day public review and comment period from October 16, 2008 to November 14, 2008. No comment letters were received relative to the Draft EA. The environmental analysis in the Draft EA concluded that the adoption of proposed Rule 1147 would not generate any significant adverse environmental impacts. After circulation of the Draft EA, a Final EA was prepared and certified by the SCAQMD Governing Board on December 5, 2008. This document can be obtained by visiting the following website at:

<http://www.aqmd.gov/ceqa/documents/2008/aqmd/finaleA/FEA1147.pdf>.

## **INTENDED USES OF THIS DOCUMENT**

In general, a CEQA document is an informational document that informs a public agency's decision-makers and the public generally of potentially significant adverse environmental effects of a project, identifies possible ways to avoid or minimize the significant effects, and describes reasonable alternatives to the project (CEQA Guidelines § 15121). A public agency's decision-makers must consider the information in a CEQA document prior to making a decision on the project. Accordingly, this Draft SEA is intended to: a) provide the SCAQMD Governing Board and the public with information on the environmental effects of the proposed project; and b) be used as a tool by the SCAQMD Governing Board to facilitate decision making on the proposed project.

Additionally, CEQA Guidelines § 15124(d)(1) requires a public agency to identify the following specific types of intended uses of a CEQA document:

1. A list of the agencies that are expected to use the SEA in their decision-making;
2. A list of permits and other approvals required to implement the project; and,
3. A list of related environmental review and consultation requirements required by federal, state, or local laws, regulations, or policies.

There are no permits or other approvals required to implement PAR 1147. Moreover, PAR 1147 is not subject to any other related environmental review or consultation requirements.

To the extent that local public agencies, such as cities, county planning commissions, et cetera, are responsible for making land use and planning decisions related to projects that must comply with the requirements in PAR 1147, they could possibly rely on this SEA during their decision-making process. Similarly, other single purpose public agencies approving projects at facilities complying with the proposed project may rely on this SEA.

## **AREAS OF CONTROVERSY**

CEQA Guidelines § 15123(b)(2) requires a public agency to identify the areas of controversy in the CEQA document, including issues raised by agencies and the public. Over the course of developing the proposed project, the predominant concerns expressed by representatives of industry and environmental groups, either in public meetings or in written comments, regarding the proposed project are highlighted in Table 1-1.

**Table 1-1  
Areas of Controversy**

<b>Areas of Controversy</b>	<b>Topics Raised by the Public</b>	<b>SCAQMD Evaluation</b>
Lack of availability of the burners, ovens, incinerators, related equipment, and small existing in-use units (with NO <sub>x</sub> emissions of one pound per day or less)	Suppliers cannot consistently provide an equipment that meets the emission limit for a particular application.	A technology assessment has been performed for the equipment subject to the requirements in Rule 1147. The conclusion in the technology assessment recommended providing additional time for achieving compliance; and changing the emissions limits for certain existing equipment as described in the PAR 1147.

Pursuant to CEQA Guidelines § 15131(a), “Economic or social effects of a project shall not be treated as significant effects on the environment.” CEQA Guidelines § 15131(b) states further, “Economic or social effects of a project may be used to determine the significance of physical changes caused by the project.” Physical changes that may be caused PAR 1147 have been evaluated in Chapter 4 of this SEA. No direct or indirect physical changes resulting from economic or social effects have been identified as a result of implementing PAR 1147.

Of the topics discussed to address the concerns raised relative to CEQA and the secondary impacts that would be associated with implementing the proposed project, to date, no other controversial issues were raised as a part of developing the proposed project.

## **EXECUTIVE SUMMARY**

CEQA Guidelines § 15123 requires a CEQA document to include a brief summary of the proposed actions and their consequences. In addition, areas of controversy including issues raised by the public must also be included in the executive summary (see preceding discussion). This SEA consists of the following chapters: Chapter 1 – Executive Summary; Chapter 2 – Project Description; Chapter 3 – Existing Setting, Chapter 4 – Potential Environmental Impacts and Mitigation Measures; Chapter 5 – Project Alternatives; and various appendices. The following subsections briefly summarize the contents of each chapter.

### **Summary of Chapter 1 – Executive Summary**

Chapter 1 includes an introduction of the proposed project and a discussion of the legislative authority that allows the SCAQMD to amend and adopt air pollution control rules, identifies general CEQA requirements and the intended uses of this CEQA document, and summarizes the remaining four chapters that comprise this SEA.

## Summary of Chapter 2 - Project Description

PAR 1147 reflects the recommendations made in the technology assessment and contains additional changes necessary to resolve compliance issues that have been raised by stakeholders. If adopted, PAR 1147 would:

- ~~change~~ remove the requirement to comply with the NO<sub>x</sub> emission limit for low temperature (<1,200 degrees Fahrenheit (°F)) ovens and other units with a heat input rating of less than 325,000 British Thermal Units per hour (BTU/hour). These units would still be subject to maintenance and recordkeeping requirements from 30 parts per million (ppm) to 60 ppm;
- change the NO<sub>x</sub> emission limit for low temperature afterburners, burn-off ovens, incinerators, and related equipment from 30 ppm to 60 ppm;
- change the compliance date for small in-use units (with NO<sub>x</sub> emissions of one pound per day or less) from a schedule based on a 20 year lifetime to a 30 year lifetime or until the units are replaced, or retrofit or relocated;
- change the compliance date for existing in-use heated process tanks and pressure washers from a schedule based on a 15 year to 20 year lifetime to when the units are replaced or retrofit or relocated. These units would not be required to comply with an emission limit at any specific age and may be relocated with a facility move;
- add a testing exemption for ultra-low NO<sub>x</sub> infrared burners;
- provide compliance flexibility for low emission units by clarifying options for demonstrating emissions less than one pound per day;
- add an exemption for units with emission less than one pound per day when a company relocates a facility and remains under the same ownership;
- add an exemption for units that become subject to the rule upon amendment of Rule 219 on or after May 5, 2017, until the unit is replaced;
- add flexibility for demonstrating compliance with emission limits including an alternative compliance demonstration option based on a manufacturer's performance guarantee;
- clarify an exemption for food ovens; and
- clarify an exemption for flare type systems.

If adopted, PAR 1147 is expected to result in NO<sub>x</sub> emission reductions foregone of up to 0.9 ton per day in 2017. However, while most of the estimated NO<sub>x</sub> emission reductions foregone will be eventually recaptured because the existing units will be regularly replaced and upgraded over time, approximately 0.03 ton per day of the NO<sub>x</sub> emission reductions foregone will be permanent (see Table 4-3).

Other minor changes are also proposed for clarity and consistency throughout the rule. A copy of PAR 1147 can be found in Appendix A of this SEA.

### **Summary of Chapter 3 - Existing Setting**

Pursuant to the CEQA Guidelines § 15125, Chapter 3 – Existing Setting, includes a description of the environmental area (e.g., air quality) that was identified in the NOP/IS (see Appendix B of this SEA) as being potentially adversely affected by PAR 1147. The following discussion briefly highlights the existing setting for the topic of air quality.

#### **Air Quality**

Air quality in the area of the SCAQMD's jurisdiction has shown substantial improvement over the last two decades. Nevertheless, some federal and state air quality standards are still exceeded frequently and by a wide margin. Of the NAAQS established for seven criteria pollutants (ozone, lead, SO<sub>2</sub>, NO<sub>2</sub>, CO, PM<sub>10</sub> and PM<sub>2.5</sub>), the area within the SCAQMD's jurisdiction is only in attainment with the NAAQS for CO, SO<sub>2</sub>, and NO<sub>2</sub>. Chapter 3 provides a brief description of the existing air quality setting for each criteria pollutant, as well as the human health effects resulting from exposure to each criteria pollutant.

### **Summary of Chapter 4 - Environmental Impacts**

CEQA Guidelines § 15126(a) requires a CEQA document to identify and focus on the “significant environmental effects of the proposed project.” Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. In addition, CEQA Guidelines § 15126(b) requires a CEQA document to identify the significant environmental effects which cannot be avoided if the proposed project is implemented. CEQA Guidelines § 15126(c) also requires a CEQA document to consider and discuss the significant irreversible environmental changes which would be involved if the proposed project is implemented. Further, CEQA Guidelines § 15126(e) requires a CEQA document to consider and discuss mitigation measures proposed to minimize the significant effects. Finally, CEQA Guidelines § 15130 requires a CEQA document to discuss whether the proposed project has cumulative impacts. Chapter 4 considers and discusses each of these requirements.

A NOP/IS was prepared for the proposed project that includes an environmental checklist of approximately 17 environmental topics to be evaluated for potentially significant adverse impacts from a proposed project. Review of the proposed project at the NOP/IS stage identified only one environmental topic area, operational air quality, as having potentially significant adverse impacts requiring further review in this SEA. Further review of this environmental topic area is contained in this chapter.

In addition, where the NOP/IS concluded that the project would have no significant or less than significant direct or indirect adverse effects on the remaining environmental topics areas, the conclusions for these environmental topic areas are consistent with the conclusions reached in the previously certified documents (e.g., the December 2008 Final EA and the September 2011 Final SEA) that aside from the topic of operational air quality, there would be no other significant adverse effects from implementing PAR 1147. Further, of the comments received on the NOP/IS or at the CEQA scoping meetings, none of the comments changed this conclusion. The screening

analysis in the NOP/IS concluded that the following environmental areas would not be significantly adversely affected by the proposed project:

- aesthetics
- air quality during construction and greenhouse gas emissions during construction and operation
- agriculture and forestry resources
- biological resources
- cultural resources
- energy
- geology and soils
- hazards and hazardous materials
- hydrology and water quality
- land use and planning
- mineral resources
- noise
- population and housing
- public services
- recreation
- solid and hazardous waste
- transportation and traffic

### **Other CEQA Topics**

CEQA documents are also required to consider and discuss the potential for growth-inducing impacts (CEQA Guidelines § 15126(d) and to explain and make findings about the relationship between short-term uses and long-term productivity (CEQA Guidelines § 15065(a)(2)). Additional analysis of the proposed project confirms that it would not result in irreversible environmental changes or the irretrievable commitment of resources, foster economic or population growth or the construction of additional housing. Further, implementing the proposed project is not expected to achieve short-term goals at the expense of long-term environmental productivity or goal achievement.

### **Summary Chapter 5 - Alternatives**

Four alternatives to the proposed project are summarized in Table 1-2: Alternative A (No Project), Alternative B (More Stringent), Alternative C (Less Stringent), and Alternative D (Least Stringent). Pursuant to the requirements in CEQA Guidelines § 15126.6(b) to mitigate or avoid the significant effects that a project may have on the environment, a comparison of the potentially significant adverse operational air quality impacts from each of the project alternatives for the individual rule components that comprise the proposed project is provided in Table 1-3. Aside

from operational air quality impacts, no other potentially significant adverse impacts were identified for the proposed project or any of the project alternatives. The proposed project is considered to provide the best balance between the remaining emission reductions that other components of Rule 1147 may continue to achieve and the adverse environmental impacts due to operation activities (from emission reductions foregone) while meeting the objectives of the project. Therefore, the proposed project is preferred over the project alternatives.



**Table 1-2**  
**Summary of the Proposed Project and Alternatives**

<b>Category</b>		<b>Proposed Project</b>	<b>Alternative A: No Project</b>	<b>Alternative B: More Stringent</b>	<b>Alternative C: Less Stringent</b>	<b>Alternative D: Least Stringent</b>
Equipment with NOx emissions < 1 lb/day	Require compliance with emission limit at specific age	30 years, (less stringent than current rule)	20 years (same as current rule but more stringent than proposed project)	25 years (less stringent than current rule but more stringent than proposed project)	No age requirement (less stringent than current rule and proposed project)	No age requirement (less stringent than current rule and proposed project)
	Demonstration of compliance with NOx emission limit	Applicable to new, replacement and rebuilt units but not to relocation of units by the same company and owner	Applicable to new, replacement and rebuilt units (current rule)	Applicable to new, replacement and rebuilt units (same as current rule)	Applicable to new, replacement and rebuilt units but not to relocation of units by the same company and owners	Compliance with limit is not required if provided that records demonstrate emissions < 1 lb/day. However, if records do not demonstrate < 1 lb/day NOx or records are not kept, then the owner/operator shall demonstrate compliance with unit specific NOx limit.
	Other requirements or exemptions	<del>N/A</del> Further relax limits for units < 325,000 BTU/hour by exempting from any limit	N/A	Require compliance with emission (ppm) limits when multiple similar process units at a facility have combined emissions ≥ 1 lb/day NOx (more stringent than proposed project).	Exempt all pressure washers (less stringent than proposed project) and units < 800 °F and 325,000 BTU/hour from any limit.	Exempt all pressure washers (less stringent than proposed project); and units < 325,000 BTU/hour from any limit.

**Table 1-3**  
**Comparison of Significant Adverse Operational Air Quality Impacts of the Proposed Project and Alternatives**

<b>Environmental Topic Area</b>	<b>Proposed Project</b>	<b>Alternative A: No Project</b>	<b>Alternative B: More Stringent</b>	<b>Alternative C: Less Stringent</b>	<b>Alternative D: Least Stringent</b>
<b>Air Quality During Operation</b>	NOx emission reductions foregone up to 0.9 ton per day. <del>The</del> <u>Most</u> emissions reductions will be recovered over time. <u>Permanent NOx emission reductions foregone up to 0.03 ton per day (see Table 4-3).</u>	No new NOx emission reductions foregone.	NOx emission reductions foregone up to 0.9 ton per day. The emissions reductions foregone will be recovered, but over a shorter time frame than the proposed project.	NOx emission reductions foregone up to 0.9 ton per day. The emissions reductions foregone will be recovered, but over a longer time frame than the proposed project.	Permanent NOx emission reductions foregone up to 0.9 ton per day.
<b>Significance of Air Quality Operational Impacts?</b>	Significant because the amount of NOx emission reductions foregone exceeds the NOx significance threshold of 55 pounds per day.	Not significant, however, compliance may be difficult to achieve for categories of equipment where the proposed project changes emission limits.	Significant because the amount of NOx emission reductions foregone exceeds the NOx significance threshold of 55 pounds per day. (less significant than the proposed project for years 2018 and beyond).	Significant because the amount of NOx emission reductions foregone exceeds the NOx significance threshold of 55 pounds per day. (more significant than the proposed project for years 2018 and beyond).	Significant because the amount of NOx emission reductions foregone exceeds the NOx significance threshold of 55 pounds per day. (more significant than the proposed project for years 2018 and beyond).

## **CHAPTER 2**

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### **PROJECT DESCRIPTION**

**Project Location**

**Project Background**

**Project Objective**

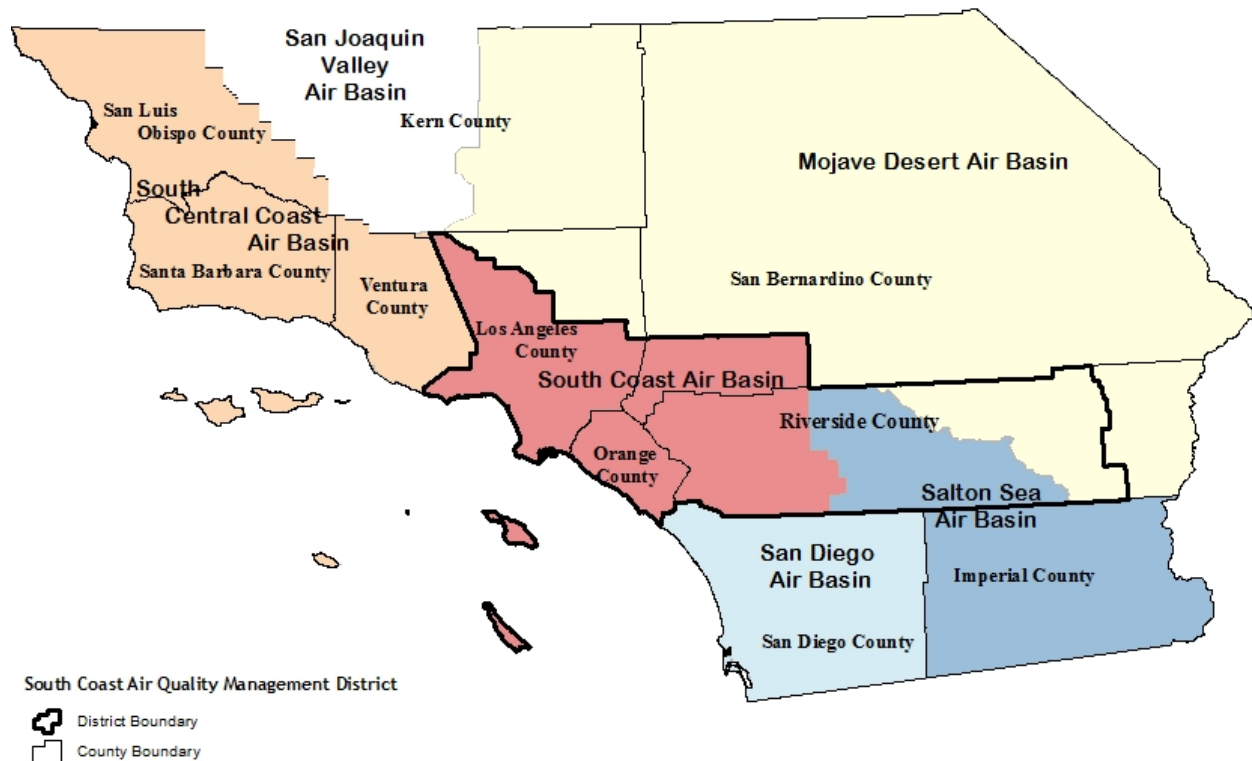
**Project Description**

**Technology Assessment**

**Summary of Affected Equipment**

## PROJECT LOCATION

PAR 1147 would affect up to 3,900 facilities which are located within SCAQMD's jurisdiction. The SCAQMD has jurisdiction over an area of approximately 10,743 square miles, consisting of the four-county South Coast Air Basin (Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino counties), and the Riverside County portions of the Salton Sea Air Basin (SSAB) and Mojave Desert Air Basin (MDAB). The Basin, which is a subarea of SCAQMD's jurisdiction, is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto mountains to the north and east. It includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. The Riverside County portion of the SSAB is bounded by the San Jacinto Mountains in the west and spans eastward up to the Palo Verde Valley. A federal nonattainment area (known as the Coachella Valley Planning Area) is a subregion of Riverside County and the SSAB that is bounded by the San Jacinto Mountains to the west and the eastern boundary of the Coachella Valley to the east (see Figure 2-1).



**Figure 2-1**  
**Southern California Air Basins**

## **PROJECT BACKGROUND**

When Rule 1147 was originally adopted by the SCAQMD Governing Board on December 5, 2008, it established NO<sub>x</sub> emission limits for a variety of combustion equipment and affected new and existing combustion equipment requiring permits that are not regulated by other SCAQMD rules limiting emissions of NO<sub>x</sub>. Rule 1147 incorporated two control measures of the 2007 AQMP: CMB-01 – NO<sub>x</sub> Reductions from Non-RECLAIM Ovens, Dryers and Furnaces, and MCS-01 – Facility Modernization. Control Measure MCS-01 proposed that existing in-use equipment over time meet best available control technology (BACT) emission limits in place at the time the 2007 AQMP was adopted. Control Measure CMB-01 proposed emission NO<sub>x</sub> limits in the range of 20 to 60 parts per million (ppm) for ovens, dryers, kilns, furnaces and other combustion equipment.

Under Rule 1147, regulated gaseous fuel-fired equipment must meet an emission limit of 30 or 60 ppm of NO<sub>x</sub> based on the type of equipment and process temperature. All regulated liquid fuel-fired equipment must meet an emission limit of 40 or 60 ppm for NO<sub>x</sub> based on its process temperature. Compliance dates for emission limits are based on the date of equipment manufacture and emission limits are applicable to older equipment first. Owners of equipment are provided at least 15 years before they must modify or replace existing equipment to meet emission limits.

Rule 1147 also established NO<sub>x</sub> emissions test methods and provided alternate compliance options including a process for certification of equipment through an approved testing program. Other requirements included equipment maintenance, time and fuel meter installation and record keeping.

Rule 1147 was subsequently amended on September 9, 2011 to: 1) delay implementation dates by up to two years; 2) remove a requirement for fuel or time meters; and 3) provide compliance flexibility for small and large sources. In addition, the amendments included a requirement for a technology assessment to be conducted on the availability of low NO<sub>x</sub> burner systems for processes with NO<sub>x</sub> emissions of one pound per day or less that are not typically subject to a BACT requirement as new sources. The technology assessment was completed and included an evaluation of cost and cost effectiveness for small and low emission sources. The technology assessment was reviewed by a third party consultant. As a result, PAR 1147 was crafted to be consistent with the recommendations provided by the third party consultant. In addition, PAR 1147 also contains elements to address recommendations proposed by staff (that were separate from the consultant's review) in order to resolve certain stakeholders' compliance issues.

## **PROJECT OBJECTIVE**

The primary objective of the proposed project is to address issues of technical feasibility and cost effectiveness that were the basis of recommendations in the SCAQMD "Technology Assessment for Rule 1147 Small and Low Emission Sources." In particular, PAR 1147 was crafted to address recommendations from the Rule 1147 technology assessment which include and address technical and cost effectiveness issues raised by stakeholders. These changes make Rule 1147 more consistent with SCAQMD's new source review (NSR) and best available control technology

(BACT) requirements for small and low emission sources with NOx emissions less than one pound per day.

## PROJECT DESCRIPTION

SCAQMD staff is proposing to amend Rule 1147 to reflect the recommendations made in the technology assessment and to resolve compliance issues that have been raised by stakeholders. If adopted, PAR 1147 would:

- ~~Change~~ Remove the requirement to comply with the NOx emission limit for low temperature (<1,200 °F) ovens and other units with a heat input rating of less than 325,000 BTU/hour from 30 ppm to 60 ppm [see Table 1, paragraph (c)(1)]. These units would still be subject to maintenance and recordkeeping requirements;
- Change the NOx emission limit for low temperature afterburners, burn-off ovens, incinerators, and related equipment from 30 ppm to 60 ppm [see Table 1, paragraph (c)(1)];
- Change the compliance date for small in-use units (with NOx emissions of less than one pound per day) from a schedule based on a 20 year lifetime to a 30 year lifetime or when the units are replaced or; retrofit ~~or relocated~~ [see paragraph (c)(6) ];
- Change the compliance date for existing in-use heated process tanks and pressure washers from a schedule based on a 15 year to 20 year lifetime to when the units are replaced; or retrofit or relocated. These units would not be required to comply with an emission limit at any specific age and may be relocated with a facility move [see paragraphs (g)(8) and (g)(11)];
- Add a testing exemption for ultra-low NOx infrared burners [see paragraphs (g)(9), (g)(10), and (g)(11)];
- Provide compliance flexibility for low emission units to small emitters (less than one pound per day) by clarifying options for demonstrating emissions less than one pound per day ~~recordkeeping~~ [see paragraph (c)(6)];
- Add an exemption for units with emission less than one pound per day when a company relocates a facility and remains under the same ownership [see paragraph (g)(11) ];
- Add an exemption for units that become subject to the rule upon amendment of Rule 219 on or after May 5, 2017, until the unit is replaced [see paragraph (g)(10) ];
- Add flexibility for demonstrating compliance with emission limits including an alternative compliance demonstration option based on a manufacturer's performance guarantee [see paragraphs (d)(1) - (d)(11) ];
- Clarify an exemption for food ovens [see subdivision (a), and paragraphs (g)(1) and (g)(2)]; and

- Clarify an exemption for flare type systems [see subparagraph (g)(3)(E)].

If adopted, PAR 1147 is expected to result in NO<sub>x</sub> emission reductions foregone of up to 0.9 ton per day in 2017. However, while most of the NO<sub>x</sub> emission reductions foregone will be eventually recaptured because the existing units will be regularly replaced and upgraded over time, approximately 0.03 ton per day of NO<sub>x</sub> emission reductions will be permanently foregone (see Table 4-3). A copy of PAR 1147 can be found in Appendix A of this Draft SEA.

## TECHNOLOGY ASSESSMENT

The first phase of the SCAQMD technology assessment targeted sources in which burner technology was either not available or the retrofit cost was comparable to the cost of replacing the unit. Several categories of equipment were identified and removed from Rule 1147. Further, the requirement for a permit for these equipment categories was removed during the May 2013 amendments to SCAQMD Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II, and SCAQMD Rule 222 – Filing Requirements For Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II. SCAQMD staff continued conducting a technical evaluation and developed Rule 1153.1 – Emissions of Oxides of Nitrogen from Commercial Food Ovens, to move existing in-use food ovens, roasters and smokehouses from Rule 1147 into their own rule. Rule 1153.1 was adopted on November 7, 2014 and provided more appropriate temperature ranges for defining emission limits, food oven specific emission limits, later compliance dates and an exemption for small units. Both SCAQMD Rules 1147 and 1153.1 have been approved by U.S. EPA and are included in the SIP.

The last phase of the technology assessment focused on the remaining categories of small and low emission equipment that were not addressed in SCAQMD Rules 219, 222 and 1153.1. While the technology assessment report focused on equipment with NO<sub>x</sub> emissions of one pound per day or less, the report also included information and analysis applicable to larger units in response to businesses' concerns regarding the availability of technology for larger equipment.

The technology assessment utilizes information about affected equipment from the SCAQMD's permitting system, SCAQMD Regulation XIII - New Source Review, Rule 1147 emissions testing programs, manufacturers of equipment and burners, affected businesses, consulting engineers, and industry representatives. The technology assessment provides information on the types and number of equipment affected by Rule 1147, emissions characteristics of the affected equipment, and estimates of the cost and cost-effectiveness of replacing existing older combustion systems. Overall, the technology assessment provides insight into compliance and affordability challenges faced by businesses affected by Rule 1147.

With the exception of a few categories of equipment, the technology review demonstrates that low NO<sub>x</sub> burner systems are available for every category of equipment subject to Rule 1147 and have been since the late 1990s. However, SCAQMD staff has identified the following three types of equipment for which burners are not readily available or cannot be retrofitted: 1) low temperature ovens and dryers with heat inputs of less than 325,000 BTU/hour (0.325 MMBTU/hour); 2)

existing heated process tanks, evaporators and parts washers; and 3) low temperature burn-off ovens and incinerators.

As a result of the technology assessment, the following five recommendations were proposed for consideration in future rule amendments to Rule 1147:

1. Exempt sources with total rated heat input less than 325,000 BTU/hour from the Rule 1147 NOx emission limit or alternatively change the emission limit for low temperature units with these small burners from 30 ppm to 60 ppm for NOx;
2. Change the NOx emission limit from 30 ppm to 60 ppm NOx for the primary chamber of all multi-chamber burn-off ovens, burn-out furnaces and incinerators for all process temperature;
3. Delay compliance for existing in-use heated process tanks, evaporators and parts washers from the NOx emission limit until such time the combustion system or tank is modified, replaced or relocated;
4. Delay compliance with the NOx emission limit for existing in-use spray booths until the heating system is modified or replaced or the unit is relocated; and
5. Delay compliance with the NOx emission limit for existing in-use units with actual NOx emissions of one pound per day or less until the combustion system is modified or replaced or the unit is relocated.

## **SUMMARY OF AFFECTED EQUIPMENT**

A wide variety of processes use equipment that is regulated by Rule 1147. These processes include, but are not limited to, printing, textile processing, product coating; and material processing. A large fraction of the equipment subject to Rule 1147 heats air that is then directed to a process chamber and transfers heat to process materials. Other processes heat materials directly and include equipment such as kilns, process tanks and metallurgical furnaces.

Rule 1147 affects manufacturers (NAICS 31-33), distributors and wholesalers (NAICS 42) of combustion equipment, as well as owners and operators of ovens, dryers, furnaces, and other equipment in the District (NAICS 21, 23, 31-33, 42, 44, 45, 48, 49, 51-56, 61, 62, 71, 72, 81, and 92). The units affected by the rule are used in industrial, commercial and institutional settings for a wide variety of processes. Some examples of the processes regulated by the rule include metal casting and forging, coating and curing operations, asphalt manufacturing, baking and printing.

Based on active permitted equipment in the SCAQMD, staff has estimated the number of equipment potentially subject to Rule 1147. Staff estimates that as many as 6,400 pieces of equipment are potentially subject to Rule 1147 requirements. More than half of the units ( $\approx 3,400$ ) are spray booths and prep-stations. Excluding spray booths and prep-stations, staff estimates that at least one quarter of the units in each category will meet Rule 1147 emission limits without retrofitting burners.



The second largest category of equipment is ovens and dryers with approximately 1,100 units subject to the rule. Staff estimates that at least one-third of the permitted ovens will meet Rule 1147 emission limits based on a sample of the burners used in the ovens. There are also approximately 500 additional ovens and dryers with SCAQMD permits that are not subject to Rule 1147 because they are heated electrically, with infrared lamps, or using a boiler or thermal fluid heater. Electric, infrared lamp, and boiler and thermal fluid heated ovens and dryers are not included in the counts of equipment subject to rule requirements.

The third largest group of equipment is air pollution control units that capture and incinerate VOCs, CO, PM and toxics. There are approximately 900 afterburners, degassing units and remediation units. The remaining categories of equipment have significantly fewer units with high temperature processes (metal melting, heat treating, burn off ovens, kilns and crematories) being the next largest group with approximately 700 units in these five categories. Although these categories have fewer equipment, many units have significantly higher emissions than spray booths and small ovens.

## **CHAPTER 3**

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### **EXISTING SETTING**

**Introduction**

**Existing Setting**

**Air Quality**

## INTRODUCTION

In order to determine the significance of the impacts associated with a proposed project, it is necessary to evaluate the project's impacts against the backdrop of the environment as it exists at the time the environmental analysis is commenced. The CEQA Guidelines define "environment" as "the physical conditions that exist within the area which will be affected by a proposed project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance" (CEQA Guidelines § 15360; see also Public Resources Code § 21060.5). Furthermore, a CEQA document must include a description of the physical environment in the vicinity of the project, as it exists at the time the environmental analysis is commenced, from both a local and regional perspective (CEQA Guidelines § 15125). Therefore, the "environment" or "existing setting" against which a project's impacts are compared consists of the immediate, contemporaneous physical conditions at and around the project site (Remy, et al; 1996).

SCAQMD prepared a NOP/IS which identified environmental topics to be analyzed in a Draft EA. The initial evaluation in the NOP/IS identified the topic of operational air quality as potentially having potentially significant adverse impacts requiring further review. Following the release of the NOP/IS, further analysis of the proposed project indicated that the preparation of a SEA, in lieu of an EA, would be the appropriate document to analyze the potentially significant operational air quality impacts associated with PAR 1147 because new information of substantial importance, which was not known and could not have been known at the time the December 2008 Final EA and September Final SEA were certified, became available (CEQA Guidelines § 15162(a)(3)). Further, PAR 1147 is expected to have significant adverse effects to the topic of operational air quality that were not discussed in the previous December 2008 Final EA or September 2011 Final SEA (CEQA Guidelines § 15162(a)(3)(A)). The following section summarizes the existing setting for operational air quality which was the only environmental topic identified that may be adversely affected by the proposed project. The Final Program EIR for the 2016 AQMP also contains comprehensive information on existing and projected environmental settings for the topic of air quality. Copies of the referenced document are available from the SCAQMD's Public Information Center by calling (909) 396-2432.

## EXISTING SETTING

Rule 1147 affects the following categories of gaseous and liquid fuel-fired combustion equipment: 1) remediation units; 2) tar pots; 3) other units manufactured prior to 1986; 4) other units manufactured prior to 1992; and, 5) other units manufactured prior to 1998. Specifically, Rule 1147 controls NO<sub>x</sub> emissions from miscellaneous gas and liquid fuel fired combustion equipment, including, but not limited to: ovens, dryers, dehydrators, heaters, kilns, calciners, furnaces, heated pots, cookers, roasters, fryers, closed and open heated tanks and evaporators, distillation units, degassing units, incinerators, and soil remediation units. Under Rule 1147, regulated equipment must meet a NO<sub>x</sub> emission limit of 30 ppm to 60 ppm based on the type of equipment. Alternately, equipment may meet a NO<sub>x</sub> emission limit between 0.036 lb/MMBTU and 0.080 lb/MMBTU based on the type of equipment

### **Baseline Emission Inventory**

Rule 1147 applies to manufacturers (NAICS 333), distributors and wholesalers (NAICS 423) of combustion equipment, as well as owners and operators of ovens, dryers, furnaces, and other equipment in the district (NAICS 23, 31, 32, and 33, respectively). The units subject to Rule 1147 are used in industrial, commercial and institutional settings for a wide variety of processes. Rule 1147 is applicable to 6,600 units located at 3,000 facilities. At the time Rule 1147 was adopted in 2008, approximately 1,600 units located at 800 facilities already complied with the NOx emission limits. The baseline emission inventory for equipment subject to Rule 1147, as summarized in Table 3-1, was estimated to be 4.9 tons per day of NOx (from 2002 NOx emissions inventory in the 2007 AQMP). The percent of equipment subject to emission limits in each specific year was based upon a survey of the SCAQMD permit database.

**Table 3-1**  
**NOx Baseline Emission Inventory for Rule 1147 Equipment**  
**From December 2008 Rule Adoption**

<b>Fuel</b>	<b>Equipment Category</b>	<b>Typical Uncontrolled NOx Emissions</b>	<b>Rule 1147 NOx Emission Limit</b>	<b>No. of Units</b>	<b>NOx Baseline Emission Inventory (tons/day)</b>
<b>Natural Gas</b>	Asphalt Operations	90-120 ppm	40 ppm	71	0.071
	Open Heated Tank or Evaporator	120 ppm	60 ppm or 0.073 lb/mmBTU	200	0.199
	Degassing, Incinerator, or Soil Remediation > 1200° F	120 ppm		480	0.478
	Fryer	120 ppm		101	0.100
	Metal Heat Treating	150-210 ppm		136	0.135
	Metal Melting Furnace	150-210 ppm		118	0.117
	Metal or Tar Pot	90-210 ppm		237	0.236
	Other > 1200° F	120 ppm		295	0.293
	Oven, Dehydrator, Dryer, Heater, etc. ≤ 800° F	120 ppm	20 ppm or 0.024 lb/mmBTU	2,335	2.320
	Degassing, Incinerator, or Soil Remediation ≤ 1200° F	120 ppm	30 ppm or 0.036 lb/mmBTU	479	0.477
	Make Up Air Heater	120 ppm	30 ppm or 0.036 lb/mmBTU	34	0.034
	Oven, Dehydrator, Dryer, Heater, etc. > 800 and ≤ 1200° F	120 ppm		161	0.160
	Tenter Frame or Carpet Dryer	90-120 ppm		45	0.048
	Other Air Heater Outside Building	120 ppm		15	0.015
	Other with Process Temperature ≤ 1200° F	120 ppm		196	0.195

**Table 3-1 (Concluded)**  
**NOx Baseline Emission Inventory for Rule 1147 Equipment From December 2008 Rule Adoption**

<b>Liquid Fuel</b>	Liquid Fuel > 1200° F	120-180 ppm	60 ppm or 0.080 lb/mmBTU	0	0
	Liquid Fuel ≤ 1200° F	120-180 ppm	40 ppm or 0.053 lb/mmBTU	21	0.021
<b>Total:</b>				<b>4,924</b>	<b>4.899</b>

## AIR QUALITY

It is the responsibility of SCAQMD to ensure that state and federal ambient air quality standards are achieved and maintained in its geographical jurisdiction. Health-based air quality standards have been established by California and the federal government for the following criteria air pollutants: ozone, CO, NO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and lead. These standards were established to protect sensitive receptors with a margin of safety from adverse health impacts due to exposure to air pollution. The California standards are more stringent than the federal standards and in the case of PM<sub>10</sub> and SO<sub>2</sub>, far more stringent. California has also established standards for sulfates, visibility reducing particles, hydrogen sulfide, and vinyl chloride. The state and national ambient air quality standards for each of these pollutants and their effects on health are summarized in Table 3-2. SCAQMD monitors levels of various criteria pollutants at 38 monitoring stations. The 2015 air quality data (the latest data available) from SCAQMD's monitoring stations are presented in Table 3-3.

**Table 3-2**  
**State and Federal Ambient Air Quality Standards**

Pollutant	Averaging Time	State Standard <sup>a</sup>	Federal Primary Standard <sup>b</sup>	Most Relevant Effects
<b>Ozone (O<sub>3</sub>)</b>	1-hour	0.09 ppm (180 µg/m <sup>3</sup> )	No Federal Standard	(a) Short-term exposures: 1) Pulmonary function decrements and localized lung edema in humans and animals; and, 2) Risk to public health implied by alterations in pulmonary morphology and host defense in animals; (b) Long-term exposures: Risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (c) Vegetation damage; and, (d) Property damage.
	8-hour	0.070 ppm (137 µg/m <sup>3</sup> )	0.075 ppm (147 µg/m <sup>3</sup> )	
<b>Suspended Particulate Matter (PM<sub>10</sub>)</b>	24-hour	50 µg/m <sup>3</sup>	150 µg/m <sup>3</sup>	(a) Excess deaths from short-term exposures and exacerbation of symptoms in sensitive patients with respiratory disease; and (b) Excess seasonal declines in pulmonary function, especially in children.
	Annual Arithmetic Mean	20 µg/m <sup>3</sup>	No Federal Standard	
<b>Suspended Particulate Matter (PM<sub>2.5</sub>)</b>	24-hour	No State Standard	35 µg/m <sup>3</sup>	(a) Increased hospital admissions and emergency room visits for heart and lung disease; (b) Increased respiratory symptoms and disease; and (c) Decreased lung functions and premature death.
	Annual Arithmetic Mean	12 µg/m <sup>3</sup>	12.0 µg/m <sup>3</sup>	
<b>Carbon Monoxide (CO)</b>	1-Hour	20 ppm (23 mg/m <sup>3</sup> )	35 ppm (40 mg/m <sup>3</sup> )	(a) Aggravation of angina pectoris and other aspects of coronary heart disease; (b) Decreased exercise tolerance in persons with peripheral vascular disease and lung disease; (c) Impairment of central nervous system functions; and, (d) Possible increased risk to fetuses.
	8-Hour	9 ppm (10 mg/m <sup>3</sup> )	9 ppm (10 mg/m <sup>3</sup> )	

**Table 3-2 (Concluded)**  
**State and Federal Ambient Air Quality Standards**

<b>Pollutant</b>	<b>Averaging Time</b>	<b>State Standard<sup>a</sup></b>	<b>Federal Primary Standard<sup>b</sup></b>	<b>Most Relevant Effects</b>
<b>Nitrogen Dioxide (NO<sub>2</sub>)</b>	1-Hour	0.18 ppm (339 µg/m <sup>3</sup> )	0.100 ppm (188 µg/m <sup>3</sup> )	(a) Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; (b) Risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; and, (c) Contribution to atmospheric discoloration.
	Annual Arithmetic Mean	0.030 ppm (57 µg/m <sup>3</sup> )	0.053 ppm (100 µg/m <sup>3</sup> )	
<b>Sulfur Dioxide (SO<sub>2</sub>)</b>	1-Hour	0.25 ppm (655 µg/m <sup>3</sup> )	75 ppb (196 µg/m <sup>3</sup> )–	Broncho-constriction accompanied by symptoms which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in persons with asthma.
	24-Hour	0.04 ppm (105 µg/m <sup>3</sup> )	No Federal Standard	
<b>Sulfates</b>	24-Hour	25 µg/m <sup>3</sup>	No Federal Standard	(a) Decrease in ventilatory function; (b) Aggravation of asthmatic symptoms; (c) Aggravation of cardio-pulmonary disease; (d) Vegetation damage; (e) Degradation of visibility; and, (f) Property damage
<b>Hydrogen Sulfide (H<sub>2</sub>S)</b>	1-Hour	0.03 ppm (42 µg/m <sup>3</sup> )	No Federal Standard	Odor annoyance.
<b>Lead (Pb)</b>	30-Day Average	1.5 µg/m <sup>3</sup>	No Federal Standard	(a) Increased body burden; and (b) Impairment of blood formation and nerve conduction.
	Calendar Quarter	No State Standard	1.5 µg/m <sup>3</sup>	
	Rolling 3-Month Average	No State Standard	0.15 µg/m <sup>3</sup>	
<b>Visibility Reducing Particles</b>	8-Hour	Extinction coefficient of 0.23 per kilometer - visibility of ten miles or more due to particles when relative humidity is less than 70 percent.	No Federal Standard	The statewide standard is intended to limit the frequency and severity of visibility impairment due to regional haze. This is a visibility based standard not a health based standard. Nephelometry and AISI Tape Sampler; instrumental measurement on days when relative humidity is less than 70 percent.
<b>Vinyl Chloride</b>	24-Hour	0.01 ppm (26 µg/m <sup>3</sup> )	No Federal Standard	Highly toxic and a known carcinogen that causes a rare cancer of the liver.

a. The California ambient air quality standards for O<sub>3</sub>, CO, SO<sub>2</sub> (1-hour and 24-hour), NO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> are values not to be exceeded. All other California standards shown are values not to be equaled or exceeded.

b. The national ambient air quality standards, other than O<sub>3</sub> and those based on annual averages are not to be exceeded more than once a year. The O<sub>3</sub> standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above the standards is equal to or less than one.

KEY:      ppb = parts per billion parts of air, by volume      ppm = parts per million parts of air, by volume      µg/m<sup>3</sup> = micrograms per cubic meter      mg/ m<sup>3</sup> = milligrams per cubic meter

**Table 3-3**  
**2015 Air Quality Data – South Coast Air Quality Management District**

<b>CARBON MONOXIDE (CO)<sup>a</sup></b>				
Source Receptor Area No.	Location of Air Monitoring Station	No. Days of Data	Max. Conc. ppm, 1-hour	Max. Conc. 8ppm, 8-hour
<b>LOS ANGELES COUNTY</b>				
1	Central Los Angeles	365	3.2	1.8
2	Northwest Coastal Los Angeles County	365	1.6	1.4
3	Southwest Coastal Los Angeles County	357	1.7	1.4
4	South Coastal Los Angeles County 1	--	--	--
4	South Coastal Los Angeles County 2	--	--	--
4	South Coastal Los Angeles County 3	364	3.3	2.2
6	West San Fernando Valley	365	3.0	2.5
8	West San Gabriel Valley	365	2.6	1.6
9	East San Gabriel Valley 1	352	2.1	1.3
9	East San Gabriel Valley 2	363	1.2	1.0
10	Pomona/Walnut Valley	346	1.8	1.6
11	South San Gabriel Valley	365	2.8	1.7
12	South Central Los Angeles County	363	4.4	3.3
13	Santa Clarita Valley	359	1.2	0.9
<b>ORANGE COUNTY</b>				
16	North Orange County	365	3.0	1.6
17	Central Orange County	365	3.1	2.2
18	North Coastal Orange County	365	3.0	2.2
19	Saddleback Valley	364	1.4	0.7
<b>RIVERSIDE COUNTY</b>				
22	Norco/Corona	--	--	--
23	Metropolitan Riverside County 1	364	2.5	1.7
23	Mira Loma	362	2.3	1.6
24	Perris Valley	--	--	--
25	Lake Elsinore	364	0.8	0.6
26	Temecula	--	--	--
29	Banning Airport	--	--	--
30	Coachella Valley 1**	365	2.0	0.7
30	Coachella Valley 2**	--	--	--
<b>SAN BERNARDINO COUNTY</b>				
32	Northwest San Bernardino Valley	364	2.1	1.3
34	Central San Bernardino Valley 1	358	2.8	1.2
34	Central San Bernardino Valley 2	362	2.3	1.8
35	East San Bernardino Valley	--	--	--
37	Central San Bernardino Mountains	--	--	--
38	East San Bernardino Mountains	--	--	--
<b>SCAQMD MAXIMUM</b>			<b>4.4</b>	<b>3.3</b>
<b>SOUTH COAST AIR BASIN</b>			<b>4.4</b>	<b>3.3</b>

KEY: ppm = parts per million

-- = Pollutant not monitored

\*\* Salton Sea Air Basin

<sup>a</sup> The federal 8-hour standard (8-hour average CO > 9 ppm) and state 8-hour standard (8-hour average CO > 9.0 ppm) were not exceeded. The federal and state 1-hour standards (35 ppm and 20 ppm) were not exceeded either.



**Table 3-3 (Continued)**  
**2015 Air Quality Data – South Coast Air Quality Management District**

OZONE (O3)										
Source Receptor Area No.	Location of Air Monitoring Station	No. Days of Data	Max. Conc. in ppm 1-hr	Max. Conc. in ppm 8-hr	4th High Conc. ppm 8-hr	No. Days Standard Exceeded				
						Federal			State	
						Old > 0.124 ppm 1-hr	1997 > 0.084 ppm 8-hr	Curren t >0.075 ppm 8-hr*	Curren t > 0.09 ppm 1-hr	Curren t > 0.070 ppm 8-hr
LOS ANGELES COUNTY										
1	Central Los Angeles	365	0.104	0.074	0.072	0	6	0	2	6
2	Northwest Coastal Los Angeles County	353	0.102	0.072	0.069	0	2	0	2	3
3	Southwest Coastal Los Angeles County	365	0.096	0.077	0.069	0	3	1	1	3
4	South Coastal Los Angeles County 1	--	--	--	--	--	--	--	--	--
4	South Coastal Los Angeles County 2	--	--	--	--	--	--	--	--	--
4	South Coastal Los Angeles County 3	364	0.087	0.066	0.056	0	0	0	0	0
6	West San Fernando Valley	365	0.119	0.094	0.087	0	32	15	11	34
8	West San Gabriel Valley	361	0.111	0.084	0.082	0	18	7	12	18
9	East San Gabriel Valley 1	352	0.122	0.096	0.088	0	27	17	21	28
9	East San Gabriel Valley 2	362	0.127	0.102	0.095	2	48	34	37	51
10	Pomona/Walnut Valley	347	0.136	0.098	0.094	2	53	36	30	55
11	South San Gabriel Valley	346	0.107	0.081	0.075	0	11	2	6	11
12	South Central Los Angeles County	361	0.091	0.072	0.065	0	1	0	0	1
13	Santa Clarita Valley	358	0.126	0.108	0.091	1	52	37	23	55
ORANGE COUNTY										
16	North Orange County	365	0.103	0.082	0.073	0	7	2	4	8
17	Central Orange County	365	0.100	0.080	0.065	0	1	1	1	1
18	North Coastal Orange County	364	0.099	0.079	0.068	0	2	1	1	2
19	Saddleback Valley	358	0.099	0.088	0.075	0	8	3	2	8
RIVERSIDE COUNTY										
22	Norco/Corona	--	--	--	--	--	--	--	--	--
23	Metropolitan Riverside County 1	361	0.132	0.105	0.096	1	55	39	31	59
23	Mira Loma	356	0.127	0.104	0.093	1	51	36	29	51
24	Perris Valley	365	0.124	0.102	0.094	0	49	31	25	50
25	Lake Elsinore	362	0.131	0.098	0.093	1	31	19	18	35
26	Temecula	365	0.100	0.087	0.079	0	20	6	1	23
29	Banning Airport	359	0.124	0.097	0.091	0	46	25	16	49
30	Coachella Valley 1**	365	0.102	0.092	0.086	0	47	26	3	51
30	Coachella Valley 2**	287	0.093	0.085	0.079	0	11	4	0	12
SAN BERNARDINO COUNTY										
32	Northwest San Bernardino Valley	364	0.136	0.106	0.101	2	66	53	49	69
34	Central San Bernardino Valley 1	358	0.133	0.111	0.100	3	57	39	36	59
34	Central San Bernardino Valley 2	356	0.134	0.117	0.105	6	78	57	52	79
35	East San Bernardino Valley	329	0.137	0.115	0.102	2	76	54	44	77
37	Central San Bernardino Mountains	365	0.144	0.127	0.107	3	86	61	46	86
38	East San Bernardino Mountains	--	--	--	--	--	--	--	--	--
SCAQMD MAXIMUM			0.144	0.127	0.107	6	86	61	52	86
SOUTH COAST AIR BASIN			0.144	0.127	0.107	10	113	81	71	115

KEY:

ppm = parts per million

-- = Pollutant not monitored

\*\* Salton Sea Air Basin

• = Incomplete data

**Table 3-3 (Continued)**  
**2015 Air Quality Data – South Coast Air Quality Management District**

<b>NITROGEN DIOXIDE (NO<sub>2</sub>)<sup>b</sup></b>					
Source Receptor Area No.	Location of Air Monitoring Station	No. Days of Data	1-hour Max. Conc. ppb, 1,	1-hour 98 <sup>th</sup> Percentile Conc. ppb,	Annual Average AAM Conc. ppb
<b>LOS ANGELES COUNTY</b>					
1	Central Los Angeles	365	79.1	62.4	22.2
2	Northwest Coastal Los Angeles County	365	67.6	49.4	11.7
3	Southwest Coastal Los Angeles County	365	87.0	58.1	10.9
4	South Coastal Los Angeles County 1	--	--	--	--
4	South Coastal Los Angeles County 2	--	--	--	--
4	South Coastal Los Angeles County 3	353	101.8	64.4	19.8
6	West San Fernando Valley	354	72.5	51.7	13.5
8	West San Gabriel Valley	365	74.9	55.9	15.3
9	East San Gabriel Valley 1	351	71.0	58.5	15.4
9	East San Gabriel Valley 2	365	66.2	52.6	11.2
10	Pomona/Walnut Valley	346	72.3	60.3	21.2
11	South San Gabriel Valley	345	70.4	61.6	20.5
12	South Central Los Angeles County	363	73.6	58.7	16.9
13	Santa Clarita Valley	360	64.6	43.5	11.8
<b>ORANGE COUNTY</b>					
16	North Orange County	334	58.0	50.8	15.0
17	Central Orange County	365	59.1	54.6	14.6
18	North Coastal Orange County	357	52.4	47.9	11.6
19	Saddleback Valley	--	--	--	--
<b>RIVERSIDE COUNTY</b>					
22	Norco/Corona	--	--	--	--
23	Metropolitan Riverside County 1	361	57.4	52.3	14.4
23	Mira Loma	362	68.1	49.2	13.4
24	Perris Valley	--	--	--	--
25	Lake Elsinore	357	47.2	38.8	8.7
26	Temecula	--	--	--	--
29	Banning Airport	365	49.6	44.3	8.4
30	Coachella Valley 1**	365	41.5	37.7	6.2
30	Coachella Valley 2**	--	--	--	--
<b>SAN BERNARDINO COUNTY</b>					
32	Northwest San Bernardino Valley	359	71.6	55.7	15.9
34	Central San Bernardino Valley 1	358	89.1	66.1	18.7
34	Central San Bernardino Valley 2	362	71.4	52.7	15.2
35	East San Bernardino Valley	--	--	--	--
37	Central San Bernardino Mountains	--	--	--	--
38	East San Bernardino Mountains	--	--	--	--
<b>SCAQMD MAXIMUM</b>			101.8	66.1	22.2
<b>SOUTH COAST AIR BASIN</b>			101.8	66.1	22.2

KEY:

ppb = parts per billion

AAM = Annual Arithmetic Mean

-- = Pollutant not monitored

\*\* Salton Sea Air Basin

<sup>b</sup> The NO<sub>2</sub> federal 1-hour standard is 100 ppb and the annual standard is annual arithmetic mean NO<sub>2</sub> > 0.0534 ppm (53.4 ppb). The state 1-hour and annual standards are 0.18 ppm (180 ppb) and 0.030 ppm (30 ppb).

**Table 3-3 (Continued)**  
**2015 Air Quality Data – South Coast Air Quality Management District**

<b>SULFUR DIOXIDE (SO<sub>2</sub>)<sup>c</sup></b>				
Source Receptor Area No.	Location of Air Monitoring Station	No. Days of Data	Maximum Conc. ppb, 1-hour	99 <sup>th</sup> Percentile Conc. ppb, 1-hour
<b>LOS ANGELES COUNTY</b>				
1	Central Los Angeles	364	12.6	6.3
2	Northwest Coastal Los Angeles County	--	--	--
3	Southwest Coastal Los Angeles County	358	14.9	6.8
4	South Coastal Los Angeles County 1	--	--	--
4	South Coastal Los Angeles County 2	--	--	--
4	South Coastal Los Angeles County 3	296	37.5	11.8
6	West San Fernando Valley	--	--	--
8	West San Gabriel Valley	--	--	--
9	East San Gabriel Valley 1	--	--	--
9	East San Gabriel Valley 2	--	--	--
10	Pomona/Walnut Valley	--	--	--
11	South San Gabriel Valley	--	--	--
12	South Central Los Angeles County	--	--	--
13	Santa Clarita Valley	--	--	--
<b>ORANGE COUNTY</b>				
16	North Orange County	--	--	--
17	Central Orange County	--	--	--
18	North Coastal Orange County	352	4.5	3.1
19	Saddleback Valley	--	--	--
<b>RIVERSIDE COUNTY</b>				
22	Norco/Corona	--	--	--
23	Metropolitan Riverside County 1	363	1.9	1.6
23	Mira Loma	--	--	--
24	Perris Valley	--	--	--
25	Lake Elsinore	--	--	--
26	Temecula	--	--	--
29	Banning Airport	--	--	--
30	Coachella Valley 1**	--	--	--
30	Coachella Valley 2**	--	--	--
<b>SAN BERNARDINO COUNTY</b>				
32	Northwest San Bernardino Valley	--	--	--
34	Central San Bernardino Valley 1	352	4.0	3.1
34	Central San Bernardino Valley 2	--	--	--
35	East San Bernardino Valley	--	--	--
37	Central San Bernardino Mountains	--	--	--
38	East San Bernardino Mountains	--	--	--
<b>SCAQMD MAXIMUM</b>		364	37.5	11.8
<b>SOUTH COAST AIR BASIN</b>		364	37.5	11.8

KEY:

ppb = parts per billion

-- = Pollutant not monitored

\*\* Salton Sea Air Basin

<sup>c</sup> The federal SO<sub>2</sub> 1-hour standard is 75 ppb (0.075 ppm). The state standards are 1-hour average SO<sub>2</sub> > 0.25 ppm (250 ppb) and 24-hour average SO<sub>2</sub> > 0.04 ppm (40 ppb).

**Table 3-3 (Continued)**  
**2015 Air Quality Data – South Coast Air Quality Management District**

SUSPENDED PARTICULATE MATTER PM10 <sup>d</sup>						
Source Receptor Area No.	Location of Air Monitoring Station	No. Days of Data	Max. Conc. µg/m³, 24-hour	No. (%) Samples Exceeding Standard		Annual Average AAM Conc. <sup>e</sup> µg/m³
				Federal > 150 µg/m³, 24-hour	State > 50 µg/m³, 24-hour	
LOS ANGELES COUNTY						
1	Central Los Angeles	58	73	0	2	27.3
2	Northwest Coastal Los Angeles County	-	-	-	-	-
3	Southwest Coastal Los Angeles County	57	42	0	0	21.2
4	South Coastal Los Angeles County 1	-	-	-	-	-
4	South Coastal Los Angeles County 2	58	62	0	2	26.5
4	South Coastal Los Angeles County 3	59	80	0	6	31.5
6	West San Fernando Valley	-	-	-	-	-
8	West San Gabriel Valley	-	-	-	-	-
9	East San Gabriel Valley 1	59	101	0	12	37.1
9	East San Gabriel Valley 2	-	-	-	-	-
10	Pomona/Walnut Valley	-	-	-	-	-
11	South San Gabriel Valley	-	-	-	-	-
12	South Central Los Angeles County	-	-	-	-	-
13	Santa Clarita Valley	52	41	0	0	18.4
ORANGE COUNTY						
16	North Orange County	-	-	-	-	-
17	Central Orange County	56	59	0	2	25.4
18	North Coastal Orange County	-	-	-	-	-
19	Saddleback Valley	51	49	0	0	19.0
RIVERSIDE COUNTY						
22	Norco/Corona	44	87	0	3	29.6
23	Metropolitan Riverside County 1	114	69	0	9	31.7
23	Mira Loma	102	110	0	38	43.3
24	Perris Valley	57	74	0	3	30.3
25	Lake Elsinore	-	-	-	-	-
26	Temecula	-	-	-	-	-
29	Banning Airport	59	139	0	2	22.2
30	Coachella Valley 1**	55	33	0	0	16.7
30	Coachella Valley 2**	91	145	0	18	38.6
SAN BERNARDINO COUNTY						
32	Northwest San Bernardino Valley	-	-	-	-	-
34	Central San Bernardino Valley 1	55	96	0	13	37.8
34	Central San Bernardino Valley 2	57	78	0	3	29.9
35	East San Bernardino Valley	59	95	0	2	24.7
37	Central San Bernardino Mountains	58	41	0	0	16.1
38	East San Bernardino Mountains	-	-	-	-	-
SCAQMD MAXIMUM			145+	0+	38+	43.3+
SOUTH COAST AIR BASIN			139+	0+	49+	43.3+

KEY:

$\mu\text{g}/\text{m}^3$  = micrograms per cubic meter of air      AAM = Annual Arithmetic Mean      -- = Pollutant not monitored      \*\* Salton Sea Air Basin

+ = High FRM and FEM PM10 data samples recorded at locations in Coachella Valley and the Basin are excluded due to the high wind in accordance with the U.S. EPA Exceptional Event Regulation.

<sup>d</sup> - Federal Reference Method (FRM) PM10 samples were collected every 6 days at all sites except for Stations 4144 and 4157, where samples were collected every 3 days. PM10 statistics listed above are for the FRM data only. Federal Equivalent Method (FEM) PM10 continuous monitoring instruments were operated at some of the above locations. Max 24-hour average PM10 at sites with FEM monitoring was 152  $\mu\text{g}/\text{m}^3$ , at Indio.

<sup>e</sup> - State standard is annual average (AAM)  $> 20 \mu\text{g}/\text{m}^3$ . Federal annual PM10 standard (AAM  $> 50 \mu\text{g}/\text{m}^3$ ) was revoked in 2006.

**Table 3-3 (Continued)**  
**2015 Air Quality Data – South Coast Air Quality Management District**

<b>SUSPENDED PARTICULATE MATTER PM<sub>2.5</sub><sup>f</sup></b>						
Source Receptor Area No.	Location of Air Monitoring Station	No. Days of Data	Max. Conc. $\mu\text{g}/\text{m}^3$ , 24-hour	98 <sup>th</sup> Percentile Conc. in $\mu\text{g}/\text{m}^3$ 24-hr	No. (%) Samples Exceeding Federal Std $> 35 \mu\text{g}/\text{m}^3$ , 24-hour	Annual Average AAM Conc. <sup>g)</sup> $\mu\text{g}/\text{m}^3$
<b>LOS ANGELES COUNTY</b>						
1	Central Los Angeles	342	56.4	38.0	7	12.38
2	Northwest Coastal Los Angeles County	-	-	-	-	-
3	Southwest Coastal Los Angeles County	-	-	-	-	-
4	South Coastal Los Angeles County 1	338	54.6	32.1	3	10.81
4	South Coastal Los Angeles County 2	347	48.3	31.2	4	10.26
4	South Coastal Los Angeles County 3	-	-	-	-	-
6	West San Fernando Valley	113	36.8	28.4	1	8.84
8	West San Gabriel Valley	119	48.5	32.4	2	9.85
9	East San Gabriel Valley 1	120	70.3	30.0	2	9.88
9	East San Gabriel Valley 2	-	-	-	-	-
10	Pomona/Walnut Valley	-	-	-	-	-
11	South San Gabriel Valley	118	52.7	41.8	3	11.52
12	South Central Los Angeles County	111	41.3	37.2	3	11.78
13	Santa Clarita Valley	-	-	-	-	-
<b>ORANGE COUNTY</b>						
16	North Orange County	-	-	-	-	-
17	Central Orange County	295	45.8	29.8	3	9.38
18	North Coastal Orange County	-	-	-	-	-
19	Saddleback Valley	115	31.5	15.1	0	7.05
<b>RIVERSIDE COUNTY</b>						
22	Norco/Corona	-	-	-	-	-
23	Metropolitan Riverside County 1	341	54.7	38.1	9	11.89
23	Mira Loma	343	56.6	43.2	17	13.34
24	Perris Valley	-	-	-	-	-
25	Lake Elsinore	-	-	-	-	-
26	Temecula	-	-	-	-	-
29	Banning Airport	-	-	-	-	-
30	Coachella Valley 1**	108	22.7	17.1	0	5.76
30	Coachella Valley 2**	94	24.6	19.7	0	7.54
<b>SAN BERNARDINO COUNTY</b>						
32	Northwest San Bernardino Valley	-	-	-	-	-
34	Central San Bernardino Valley 1	114	50.5	37.7	3	11.05
34	Central San Bernardino Valley 2	110	53.5	33.6	2	10.74
35	East San Bernardino Valley	-	-	-	-	-
37	Central San Bernardino Mountains	-	-	-	-	-
38	East San Bernardino Mountains	58	39.4	35.3	1	7.59
<b>SCAQMD MAXIMUM</b>			70.3	43.2	17	13.34
<b>SOUTH COAST AIR BASIN</b>			70.3	43.2	25**	13.34

KEY:

- <sup>f</sup>  $\mu\text{g}/\text{m}^3$  = micrograms per cubic meter of air      AAM = Annual Arithmetic Mean      -- = Pollutant not monitored      \*\* Salton Sea Air Basin
- PM<sub>2.5</sub> samples were collected every 3 days at all sites except for station numbers 072, 077, 087, 3176, 4144 and 4165, where samples were taken daily, and station number 5818 where samples were taken every 6 days. PM<sub>2.5</sub> statistics listed above are for the FRM data only. FEM PM<sub>2.5</sub> continuous monitoring instruments were operated at some of the above locations for special purposes studies.
- <sup>g</sup> Both federal and state standards are annual average (AAM)  $> 12.0 \mu\text{g}/\text{m}^3$ .

**Table 3-3 (Concluded)**  
**2015 Air Quality Data – South Coast Air Quality Management District**

		LEAD <sup>h</sup>		SULFATES (SO <sub>x</sub> ) <sup>i</sup>	
Source Receptor Area No.	Location of Air Monitoring Station	Max. Monthly Average Conc. <sub>m)</sub> µg/m <sup>3</sup>	Max. 3-Month Rolling Average <sup>m)</sup> µg/m <sup>3</sup>	No. Days of Data	Max. Conc. µg/m <sup>3</sup> , 24-hour
LOS ANGELES COUNTY					
1	Central Los Angeles	0.013	0.01	--	--
2	Northwest Coastal Los Angeles County	--	--	--	--
3	Southwest Coastal Los Angeles County	0.008	0.01	--	--
4	South Coastal Los Angeles County 1	--	--	--	--
4	South Coastal Los Angeles County 2	0.010	0.01	--	--
4	South Coastal Los Angeles County 3	--	--	--	--
6	West San Fernando Valley	--	--	--	--
8	West San Gabriel Valley	--	--	--	--
9	East San Gabriel Valley 1	--	--	--	--
9	East San Gabriel Valley 2	--	--	--	--
10	Pomona/Walnut Valley	--	--	--	--
11	South San Gabriel Valley	0.014	0.01	--	--
12	South Central Los Angeles County	0.014	0.01	--	--
13	Santa Clarita Valley	--	--	--	--
ORANGE COUNTY					
16	North Orange County	--	--	--	--
17	Central Orange County	--	--	--	--
18	North Coastal Orange County	--	--	--	--
19	Saddleback Valley	--	--	--	--
RIVERSIDE COUNTY					
22	Norco/Corona	--	--	--	--
23	Metropolitan Riverside County 1	0.008	0.01	--	--
23	Mira Loma	--	--	--	--
24	Perris Valley	--	--	--	--
25	Lake Elsinore	--	--	--	--
26	Temecula	--	--	--	--
29	Banning Airport	--	--	--	--
30	Coachella Valley 1**	--	--	--	--
30	Coachella Valley 2**	--	--	--	--
SAN BERNARDINO COUNTY					
32	Northwest San Bernardino Valley	0.010	0.01	--	--
34	Central San Bernardino Valley 1	--	--	--	--
34	Central San Bernardino Valley 2	0.012	0.01	--	--
35	East San Bernardino Valley	--	--	--	--
37	Central San Bernardino Mountains	--	--	--	--
38	East San Bernardino Mountains	--	--	--	--
SCAQMD MAXIMUM		0.014	0.010	--	--
SOUTH COAST AIR BASIN		0.014	0.010	--	--

KEY:

µg/m<sup>3</sup> = micrograms per cubic meter of air    -- = Pollutant not monitored

\*\* Salton Sea Air Basin

h    Federal lead standard is 3-months rolling average > 0.15 µg/m<sup>3</sup>; state standard is monthly average ≥ 1.5 µg/m<sup>3</sup>. Lead standards were not exceeded.

i    Sulfate data is not available at this time. State sulfate standard is 24-hour

for Sulfates. There is no federal standard

## **Carbon Monoxide**

CO is a primary pollutant, meaning that it is directly emitted into the air, not formed in the atmosphere by chemical reaction of precursors, as is the case with ozone and other secondary pollutants. Ambient concentrations of CO in the Basin exhibit large spatial and temporal variations due to variations in the rate at which CO is emitted and in the meteorological conditions that govern transport and dilution. Unlike ozone, CO tends to reach high concentrations in the fall and winter months. The highest concentrations frequently occur on weekdays at times consistent with rush hour traffic and late night during the coolest, most stable portion of the day.

Individuals with a deficient blood supply to the heart are the most susceptible to the adverse effects of CO exposure. The effects observed include earlier onset of chest pain with exercise, and electrocardiograph changes indicative of worsening oxygen supply to the heart.

Inhaled CO has no direct toxic effect on the lungs, but exerts its effect on tissues by interfering with oxygen transport by competing with oxygen to combine with hemoglobin present in the blood to form carboxyhemoglobin (COHb). Hence, conditions with an increased demand for oxygen supply can be adversely affected by exposure to CO. Individuals most at risk include patients with diseases involving heart and blood vessels, fetuses, and patients with chronic hypoxemia (oxygen deficiency) as seen in high altitudes.

Reductions in birth weight and impaired neurobehavioral development have been observed in animals chronically exposed to CO resulting in COHb levels similar to those observed in smokers. Recent studies have found increased risks for adverse birth outcomes with exposure to elevated CO levels. These include preterm births and heart abnormalities.

CO concentrations were measured at 23 locations in the Basin and neighboring Salton Sea Air Basin areas in 2014. CO concentrations did not exceed the standards in 2014. The highest 1-hour average CO concentration recorded (4.4 ppm in the South Central Los Angeles County area) was 22 percent of the federal 1-hour CO standard of 20 ppm. The highest 8-hour average CO concentration recorded (3.3 ppm in the South Central Los Angeles County area) was 37 percent of the federal 8-hour CO standard of 9.0 ppm. The state 1-hour standard is also 9.0 ppm. The highest 8-hour average CO concentration is 17 percent of the state 8-hour CO standard of 20 ppm.

In 2004, SCAQMD formally requested the U.S. EPA to re-designate the Basin from nonattainment to attainment with the CO NAAQS. On February 24, 2007, U.S. EPA published in the Federal Register its proposed decision to re-designate the Basin from nonattainment to attainment for CO. The comment period on the re-designation proposal closed on March 16, 2007 with no comments received by the U.S. EPA. On May 11, 2007, U.S. EPA published in the Federal Register its final decision to approve SCAQMD's request for re-designation from non-attainment to attainment for CO, effective June 11, 2007.

On August 12, 2011 U.S. EPA issued a decision to retain the existing NAAQS for CO, determining that those standards provided the required level of public health protection. However, U.S. EPA added a monitoring requirement for near-road CO monitors in urban areas with population of one million or more, utilizing stations that would be implemented to meet the 2010 NO<sub>2</sub> near-road

monitoring requirements. The two new CO monitors are at the I-5 near-road site, located in Orange County near Anaheim, and the I-10 near-road site, located near Etiwanda Avenue in San Bernardino County near Ontario, Rancho Cucamonga and Fontana.

The near-road CO measurements began at these two locations in late December 2014. From that time to the end of 2015, the preliminary data shows that while the near-road measurements were often higher than the nearest ambient monitors, as would be expected in the near-road environment, they did not exceed the levels of the 1-hour or 8-hour CO NAAQS. The preliminary 2015 near-road peak 1-hour CO concentration measured was 2.6 ppm, measured at the I-10 near-road site, while the peak 8-hour CO concentration was 3.1 ppm at the I-5 near-road site, both well below the respective NAAQS levels (35 ppm and 9 ppm, respectively). Based on this limited period of data, it appears that the near-road CO design values will be unlikely to affect the Basin's attainment status for the state and federal CO standards.

### **Ozone**

Ozone (O<sub>3</sub>), a colorless gas with a sharp odor, is a highly reactive form of oxygen. High ozone concentrations exist naturally in the stratosphere. Some mixing of stratospheric ozone downward through the troposphere to the earth's surface does occur; however, the extent of ozone transport is limited. At the earth's surface in sites remote from urban areas ozone concentrations are normally very low (e.g., from 0.03 ppm to 0.05 ppm).

The propensity of ozone for reacting with organic materials causes it to be damaging to living cells and ambient ozone concentrations in the Basin are frequently sufficient to cause health effects. Ozone enters the human body primarily through the respiratory tract and causes respiratory irritation and discomfort, makes breathing more difficult during exercise, and reduces the respiratory system's ability to remove inhaled particles and fight infection.

Individuals exercising outdoors, children and people with preexisting lung disease, such as asthma and chronic pulmonary lung disease, are considered to be the most susceptible subgroups for ozone effects. Short-term exposures (lasting for a few hours) to ozone at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes. In recent years, a correlation between elevated ambient ozone levels and increases in daily hospital admission rates, as well as mortality, has also been reported. An increased risk for asthma has been found in children who participate in multiple sports and live in high ozone communities. Elevated ozone levels are also associated with increased school absences.

Ozone exposure under exercising conditions is known to increase the severity of the above mentioned observed responses. Animal studies suggest that exposures to a combination of pollutants which include ozone may be more toxic than exposure to ozone alone. Although lung volume and resistance changes observed after a single exposure diminish with repeated exposures, biochemical and cellular changes appear to persist, which can lead to subsequent lung structural changes.



In 2015, SCAQMD regularly monitored ozone concentrations at 29 locations in the Basin and the Coachella Valley portion of the Salton Sea Air Basin. Maximum ozone concentrations for all areas monitored were below the stage 1 episode level (0.20 ppm) and below the health advisory level (0.15 ppm) (see Table 3-3). All counties in the Basin, as well as the Coachella Valley, exceeded the level of the new 2015 (0.070 ppm), the former 2008 (0.075 ppm), and/or the 1997 (0.08 ppm) 8-hour ozone NAAQS in 2015. While not all stations had days exceeding the previous 8-hour standards, all monitoring stations had at least one day over the 2015 federal standard.

In 2015, the maximum ozone concentrations in the Basin continued to exceed federal standards by wide margins. Maximum 1-hour and 8-hour average ozone concentrations were 0.144 ppm and 0.107 ppm, respectively (the maximum 1-hour and 8-hour average was recorded in the Central San Bernardino Mountain area). The maximum 8-hour concentration of 0.127 ppm was 181 percent of the new federal standard. The maximum 1-hour concentration was 160 percent of the 1-hour state ozone standard of 0.09 ppm. The 8-hour average concentration was 160 percent of the 8-hour state ozone standard of 0.070 ppm.

### **Nitrogen Dioxide**

NO<sub>2</sub> is a reddish-brown gas with a bleach-like odor. Nitric oxide (NO) is a colorless gas, formed from the nitrogen (N<sub>2</sub>) and oxygen (O<sub>2</sub>) in air under conditions of high temperature and pressure which are generally present during combustion of fuels; NO reacts rapidly with the oxygen in air to form NO<sub>2</sub>. NO<sub>2</sub> is responsible for the brownish tinge of polluted air. The two gases, NO and NO<sub>2</sub>, are referred to collectively as NO<sub>x</sub>. In the presence of sunlight, NO<sub>2</sub> reacts to form nitric oxide and an oxygen atom. The oxygen atom can react further to form ozone, via a complex series of chemical reactions involving hydrocarbons. Nitrogen dioxide may also react to form nitric acid (HNO<sub>3</sub>) which reacts further to form nitrates, components of PM<sub>2.5</sub> and PM<sub>10</sub>.

Population-based studies suggest that an increase in acute respiratory illness, including infections and respiratory symptoms in children (not infants), is associated with long-term exposures to NO<sub>2</sub> at levels found in homes with gas stoves, which are higher than ambient levels found in Southern California. Increase in resistance to air flow and airway contraction is observed after short-term exposure to NO<sub>2</sub> in healthy subjects. Larger decreases in lung functions are observed in individuals with asthma and/or chronic obstructive pulmonary disease (e.g., chronic bronchitis, emphysema) than in healthy individuals, indicating a greater susceptibility of these subgroups. More recent studies have found associations between NO<sub>2</sub> exposures and cardiopulmonary mortality, decreased lung function, respiratory symptoms and emergency room asthma visits.

In animals, exposure to levels of NO<sub>2</sub> considerably higher than ambient concentrations results in increased susceptibility to infections, possibly due to the observed changes in cells involved in maintaining immune functions. The severity of lung tissue damage associated with high levels of ozone exposure increases when animals are exposed to a combination of ozone and NO<sub>2</sub>.

In 2015, nitrogen dioxide concentrations were monitored at 24 locations. No area of the Basin or Salton Sea Air Basin exceeded the federal or state standards for NO<sub>2</sub>. The Basin has not exceeded the federal standard for NO<sub>2</sub> (0.0534 ppm) since 1991, when the Los Angeles County portion of the Basin recorded the last exceedance of the standard in any county within the United States. The

current 1-hour average NO<sub>2</sub> NAAQS (100 ppb) was last exceeded on two days in 2014 in the South Coastal Los Angeles County area at the Long Beach-Hudson air monitoring station. However, the 98th percentile form of the standard was not exceeded and the 2013-2015 design value is not in violation of the NAAQS. The higher relative concentrations in the Los Angeles area are indicative of the concentrated emission sources, especially heavy-duty vehicles. NO<sub>x</sub> emission reductions continue to be necessary because it is a precursor to both ozone and PM (PM<sub>2.5</sub> and PM<sub>10</sub>) concentrations.

With the revised NO<sub>2</sub> federal standard in 2010, near-road NO<sub>2</sub> measurements were required to be phased in for larger cities. The four near-road monitoring stations are: (1) I-5 near-road, located in Orange County near Anaheim; (2) I-710 near-road, located at Long Beach Blvd. in Los Angeles County near Compton and Long Beach; (3) SR-60 near-road, located west of Vineyard Avenue near the San Bernardino/Riverside County border near Ontario, Mira Loma and Upland; and (4) I-10 near-road, located near Etiwanda Avenue in San Bernardino County near Ontario, Rancho Cucamonga and Fontana.

The longest operating near-road station in the Basin, adjacent to I-5 in Orange County, has not exceeded the level of the 1-hour NO<sub>2</sub> NAAQS (100 ppb) since the measurements began on January 1, 2014. The peak 1-hour NO<sub>2</sub> concentration at that site in 2014 was 78.8 ppb and the peak concentration for 2015 was 70.2 ppb. This can be compared to the annual peak values measured at the nearest ambient monitoring station in Central Orange County (Anaheim station), where the 2014 and 2015 peaks were 75.8 and 59.1, respectively. In terms of the design value form of the NAAQS, the 98th percentile daily maximum 1-hour concentrations at the Anaheim near-road site were 66.0 ppb and 61.4 ppb, respectively, for 2014 and 2015, compared to 59.8 ppb and 54.6 ppb from the Anaheim ambient monitoring station. The annual average NO<sub>2</sub> NAAQS (0.053 ppm, or 53 ppb) was also not exceeded. Thus, while the Anaheim near-road NO<sub>2</sub> measurements are higher than the ambient Orange County measurements, as would be expected close to traffic emissions sources, it does not appear that NO<sub>2</sub> design values will violate the NAAQS or CAAQS at this location. Likewise, the shorter period of data available from the remaining three near-road stations indicates that these locations will also likely measure higher NO<sub>2</sub> than the nearest ambient stations, but they have not exceeded the level of the 1-hour or annual NO<sub>2</sub> NAAQS or CAAQS through the end of 2015. Based on this limited period of data, it appears that the near-road NO<sub>2</sub> measurements will be unlikely to affect the Basin's attainment status for the state and federal NO<sub>2</sub> standards.

### **Sulfur Dioxide**

SO<sub>2</sub> is a colorless gas with a sharp odor. It reacts in the air to form sulfuric acid (H<sub>2</sub>SO<sub>4</sub>), which contributes to acid precipitation, and sulfates, which are components of PM<sub>10</sub> and PM<sub>2.5</sub>. Most of the SO<sub>2</sub> emitted into the atmosphere is produced by burning sulfur-containing fuels.

Exposure of a few minutes to low levels of SO<sub>2</sub> can result in airway constriction in some asthmatics. All asthmatics are sensitive to the effects of SO<sub>2</sub>. In asthmatics, increase in resistance to air flow, as well as reduction in breathing capacity leading to severe breathing difficulties, is observed after acute higher exposure to SO<sub>2</sub>. In contrast, healthy individuals do not exhibit similar acute responses even after exposure to higher concentrations of SO<sub>2</sub>.

Animal studies suggest that despite SO<sub>2</sub> being a respiratory irritant, it does not cause substantial lung injury at ambient concentrations. However, very high levels of exposure can cause lung edema (fluid accumulation), lung tissue damage, and sloughing off of cells lining the respiratory tract.

Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient SO<sub>2</sub> levels. In these studies, efforts to separate the effects of SO<sub>2</sub> from those of fine particles have not been successful. It is not clear whether the two pollutants act synergistically or one pollutant alone is the predominant factor.

No exceedances of federal or state standards for sulfur dioxide occurred in 2015 at any of the six locations monitored the Basin. The maximum 1-hour SO<sub>2</sub> concentration was 37.5 ppb, as recorded in the South Coastal Los Angeles County area. The maximum 24-hour SO<sub>2</sub> concentration was 11.8 ppb, as recorded in South Coastal Los Angeles County area. Though SO<sub>2</sub> concentrations remain well below the standards, SO<sub>2</sub> is a precursor to sulfate, which is a component of fine particulate matter, PM<sub>10</sub>, and PM<sub>2.5</sub>. Historical measurements showed concentrations to be well below standards and monitoring has been discontinued.

### **Particulate Matter (PM<sub>10</sub> and PM<sub>2.5</sub>)**

Of great concern to public health are the particles small enough to be inhaled into the deepest parts of the lung. Respirable particles (particulate matter less than about 10 micrometers in diameter (PM<sub>10</sub>)) can accumulate in the respiratory system and aggravate health problems such as asthma, bronchitis and other lung diseases. Children, the elderly, exercising adults, and those suffering from asthma are especially vulnerable to adverse health effects of PM<sub>10</sub> and PM<sub>2.5</sub>.

A consistent correlation between elevated ambient fine particulate matter (PM<sub>2.5</sub>) levels and an increase in mortality rates, respiratory infections, number and severity of asthma attacks and the number of hospital admissions has been observed in different parts of the United States and various areas around the world. Studies have reported an association between long-term exposure to air pollution dominated by PM<sub>2.5</sub> and increased mortality, reduction in life-span, and an increased mortality from lung cancer.

Daily fluctuations in fine particulate matter concentration levels have also been related to hospital admissions for acute respiratory conditions, to school and kindergarten absences, to a decrease in respiratory function in normal children and to increased medication use in children and adults with asthma. Studies have also shown lung function growth in children is reduced with long-term exposure to particulate matter. In addition to children, the elderly, and people with preexisting respiratory and/or cardiovascular disease appear to be more susceptible to the effects of PM<sub>10</sub> and PM<sub>2.5</sub>.

SCAQMD monitored PM<sub>10</sub> concentrations at 19 locations in 2015. The federal 24-hour PM<sub>10</sub> standard (150 µg/m<sup>3</sup>) was not exceeded in 2015. The Basin has remained in attainment of the PM<sub>10</sub> NAAQS since 2006. The maximum three-year average 24-hour PM<sub>10</sub> concentration of 145 µg/m<sup>3</sup> was recorded in the Coachella Valley area and was 97 percent of the federal standard and 290 percent of the much more stringent state 24-hour PM<sub>10</sub> standard (50 µg/m<sup>3</sup>). The state 24-

hour PM10 standard was exceeded at several of the monitoring stations. The maximum annual average PM10 concentration of 43.3  $\mu\text{g}/\text{m}^3$  was recorded in the Mira Loma area. The latest three-year annual average PM10 concentration of 44.1  $\mu\text{g}/\text{m}^3$  was recorded in the San Gabriel Valley (based on 2012 through 2014 monitoring data). The federal annual PM10 standard has been revoked. The much more stringent state annual PM10 standard (20  $\mu\text{g}/\text{m}^3$ ) was exceeded in most stations in each county in the Basin and in the Coachella Valley.

In 2015, PM2.5 concentrations were monitored at 17 locations throughout the Basin. U.S. EPA revised the federal 24-hour PM2.5 standard from 65  $\mu\text{g}/\text{m}^3$  to 35  $\mu\text{g}/\text{m}^3$ , effective December 17, 2006. In 2015, the maximum PM2.5 concentrations in the Basin exceeded the new federal 24-hour PM2.5 standard in all but three locations. The maximum 24-hour PM2.5 concentration of 70.3  $\mu\text{g}/\text{m}^3$  was recorded in the East San Gabriel Valley area. The 98th percentile 24-hour PM2.5 concentration of 43.2  $\mu\text{g}/\text{m}^3$  was recorded in the Mira Loma area, which exceeds the federal standard of 35  $\mu\text{g}/\text{m}^3$ . The maximum annual average concentration of 13.34  $\mu\text{g}/\text{m}^3$  was recorded in Mira Loma, which represents 89 percent of the 2006 federal standard of 15  $\mu\text{g}/\text{m}^3$ . The 3-year high state annual average PM2.5 concentration of 19  $\mu\text{g}/\text{m}^3$  was recorded in Metropolitan Riverside County (based on 2013 through 2015 monitoring), which represents 158 percent of the state standard of 12  $\mu\text{g}/\text{m}^3$ .

On December 14, 2012, U.S. EPA strengthened the annual NAAQS for PM2.5 to 12  $\mu\text{g}/\text{m}^3$  and, as part of the revisions, a requirement was added to monitor near the most heavily trafficked roadways in large urban areas. Particle pollution is expected to be higher along these roadways as a result of direct emissions from cars and heavy-duty diesel trucks and buses. SCAQMD has installed the two required PM2.5 monitors by January 1, 2015, at locations selected based upon the existing near-roadway NO2 sites that were ranked higher for heavy-duty diesel traffic. The locations are: (1) I-710, located at Long Beach Blvd. in Los Angeles County near Compton and Long Beach; and (2) SR-60, located west of Vineyard Avenue near the San Bernardino/Riverside County border near Ontario, Mira Loma and Upland. These near-road sites measure PM2.5 daily with FRM filter-based measurements.

The preliminary 2015 PM2.5 annual averages from the I-710 and SR-60 Near-road sites were 12.89 and 14.48  $\mu\text{g}/\text{m}^3$ , respectively. The nearby ambient stations in South Coastal Los Angeles County (North Long Beach Station) and in Metropolitan Riverside County (Mira Loma station) measured 12.81 and 13.34  $\mu\text{g}/\text{m}^3$ , respectively, for the preliminary 2015 annual average. Thus, the preliminary PM2.5 measurements from these sites for 2015 indicate that the near-road sites do indeed measure higher than the nearby ambient stations, on average. If this pattern holds for the long term, the SR-60 near-road station could potentially become the three-year design value site for the Basin for the PM2.5 annual average NAAQS, once sufficient data is collected.

While it reasonably could be expected that the highest near-road site would also become the Basin-maximum design value site for the 24-hour PM2.5 NAAQS, this may not be the case for the Basin. The 2015 98th percentile 24-hour PM2.5 concentration is higher at the I-710 near-road than at the nearby North Long Beach station. However, the 98th percentile 24-hour concentration remains higher at Mira Loma (43.2  $\mu\text{g}/\text{m}^3$ ) than at the SR-60 Near-road site (39.9  $\mu\text{g}/\text{m}^3$ ). The number of days over the 24-hour PM2.5 NAAQS was also significantly higher at the Mira Loma station, with

17 days over the 24-hour NAAQS compared to 10 days at the SR-60 near-road site. PM<sub>2.5</sub> 24-hour concentrations at the Mira Loma station are likely higher than the near-road site on the highest days, due to the influence of enhanced secondary particle formation at Mira Loma.

### **Lead**

Lead in the atmosphere is present as a mixture of a number of lead compounds. Leaded gasoline and lead smelters have been the main sources of lead emitted into the air. Due to the phasing out of leaded gasoline, there was a dramatic reduction in atmospheric lead in the Basin over the past three decades.

Fetuses, infants, and children are more sensitive than others to the adverse effects of lead exposure. Exposure to low levels of lead can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence quotient. In adults, increased lead levels are associated with increased blood pressure.

Lead poisoning can cause anemia, lethargy, seizures, and death. It appears that there are no direct effects of lead on the respiratory system. Lead can be stored in the bone from early-age environmental exposure, and elevated blood lead levels can occur due to breakdown of bone tissue during pregnancy, hyperthyroidism (increased secretion of hormones from the thyroid gland), and osteoporosis (breakdown of bone tissue). Fetuses and breast-fed babies can be exposed to higher levels of lead because of previous environmental lead exposure of their mothers.

The state standards for lead were not exceeded in any area of the SCAQMD in 2015. There have been no violations of these standards at SCAQMD's regular air monitoring stations since 1982, as a result of removal of lead from gasoline. However, monitoring at two stations immediately adjacent to stationary sources of lead recorded exceedances of the standard in Los Angeles County over the 2007-2009 time period. These data were used for designations under the revised standard that also included new requirements for near-source monitoring. As a result, a nonattainment designation was finalized for much of the Los Angeles County portion of the Basin when the current standard was implemented.

The current lead concentrations in Los Angeles County are now below the NAAQS. The maximum quarterly average lead concentration (0.01 µg/m<sup>3</sup> at several monitoring) was seven percent of the federal quarterly average lead standard (0.15 µg/m<sup>3</sup>). The maximum monthly average lead concentration (0.014 µg/m<sup>3</sup> in South San Gabriel and South Central Los Angeles County) was one percent of the state monthly average lead standard. As a result of the 2012-2014 design value below the NAAQS, SCAQMD will be requesting that U.S. EPA re-designate the nonattainment area as attaining the federal lead standard. Stringent SCAQMD rules governing lead-producing sources will help to ensure that there are no future violations of the federal standard. Furthermore, one business that had been responsible for the highest measured lead concentrations in Los Angeles County has closed and is in the process of demolition and site clean-up.

## **Sulfates**

Sulfates are chemical compounds which contain the sulfate ion and are part of the mixture of solid materials which make up PM<sub>10</sub>. Most of the sulfates in the atmosphere are produced by oxidation of SO<sub>2</sub>. Oxidation of sulfur dioxide yields sulfur trioxide (SO<sub>3</sub>) which reacts with water to form sulfuric acid, which contributes to acid deposition. The reaction of sulfuric acid with basic substances such as ammonia yields sulfates, a component of PM<sub>10</sub> and PM<sub>2.5</sub>.

Most of the health effects associated with fine particles and SO<sub>2</sub> at ambient levels are also associated with sulfates. Thus, both mortality and morbidity effects have been observed with an increase in ambient sulfate concentrations. However, efforts to separate the effects of sulfates from the effects of other pollutants have generally not been successful.

Clinical studies of asthmatics exposed to sulfuric acid suggest that adolescent asthmatics are possibly a subgroup susceptible to acid aerosol exposure. Animal studies suggest that acidic particles such as sulfuric acid aerosol and ammonium bisulfate are more toxic than nonacidic particles like ammonium sulfate. Whether the effects are attributable to acidity or to particles remains unresolved.

The most current data available for sulfates is for 2014. In 2014, the state 24-hour sulfate standard (25 µg/m<sup>3</sup>) was not exceeded in any of the 20 monitoring locations in the Basin. The maximum 24-hour sulfate concentration was 14.3 ppb, as recorded in the Central Los Angeles County area. There are no federal sulfate standards.

## **Vinyl Chloride**

Vinyl chloride is a colorless, flammable gas at ambient temperature and pressure. It is also highly toxic and is classified by the American Conference of Governmental Industrial Hygienists (ACGIH) as A1 (confirmed carcinogen in humans) and by the International Agency for Research on Cancer (IARC) as 1 (known to be a human carcinogen) (Air Gas, 2010). At room temperature, vinyl chloride is a gas with a sickly sweet odor that is easily condensed. However, it is stored as a liquid. Due to the hazardous nature of vinyl chloride to human health there are no end products that use vinyl chloride in its monomer form. Vinyl chloride is a chemical intermediate, not a final product. It is an important industrial chemical chiefly used to produce polymer polyvinyl chloride (PVC). The process involves vinyl chloride liquid fed to polymerization reactors where it is converted from a monomer to a polymer PVC. The final product of the polymerization process is PVC in either a flake or pellet form. Billions of pounds of PVC are sold on the global market each year. From its flake or pellet form, PVC is sold to companies that heat and mold the PVC into end products such as PVC pipe and bottles.

In the past, vinyl chloride emissions have been associated primarily with sources such as landfills. Risks from exposure to vinyl chloride are considered to be a localized impacts rather than regional impacts. Because landfills in the SCAQMD are subject to Rule 1150.1 – Control of Gaseous Emissions from Municipal Solid Waste Landfills, which contains stringent requirements for landfill gas collection and control, potential vinyl chloride emissions are expected to be below the

level of detection. Therefore, SCAQMD does not monitor for vinyl chloride at its monitoring stations.

### **Volatile Organic Compounds**

It should be noted that there are no state or national ambient air quality standards for VOCs because they are not classified as criteria pollutants. VOCs are regulated, however, because limiting VOC emissions reduces the rate of photochemical reactions that contribute to the formation of ozone. VOCs are also transformed into organic aerosols in the atmosphere, contributing to higher PM10 and lower visibility levels.

Although health-based standards have not been established for VOCs, health effects can occur from exposures to high concentrations of VOCs because of interference with oxygen uptake. In general, ambient VOC concentrations in the atmosphere are suspected to cause coughing, sneezing, headaches, weakness, laryngitis, and bronchitis, even at low concentrations. Some hydrocarbon components classified as VOC emissions are thought or known to be hazardous. Benzene, for example, one hydrocarbon component of VOC emissions, is known to be a human carcinogen.

### **Non-Criteria Pollutants**

Although SCAQMD's primary mandate is attaining the state and NAAQS for criteria pollutants within the Basin, SCAQMD also has a general responsibility pursuant to Health and Safety Code § 41700 to control emissions of air contaminants and prevent endangerment to public health. Additionally, state law requires SCAQMD to implement airborne toxic control measures (ATCM) adopted by CARB and to implement the Air Toxics "Hot Spots" Act. As a result, SCAQMD has regulated pollutants other than criteria pollutants such as TACs, greenhouse gases and stratospheric ozone depleting compounds. SCAQMD has developed a number of rules to control non-criteria pollutants from both new and existing sources. These rules originated through state directives, CAA requirements, or SCAQMD rulemaking process.

In addition to promulgating non-criteria pollutant rules, SCAQMD has been evaluating AQMP control measures as well as existing rules to determine whether or not they would affect, either positively or negatively, emissions of non-criteria pollutants. For example, rules in which VOC components of coating materials are replaced by a non-photochemically reactive chlorinated substance would reduce the impacts resulting from ozone formation, but could increase emissions of toxic compounds or other substances that may have adverse impacts on human health.

The following subsections summarize the existing setting for the two major categories of non-criteria pollutants: compounds that contribute to TACs, global climate change, and stratospheric ozone depletion.

## **Air Quality – Toxic Air Contaminants**

### ***Federal***

Under Section 112 of the CAA, U.S. EPA is required to regulate sources that emit one or more of the 187 federally listed hazardous air pollutants (HAPs). HAPs are air toxic pollutants identified in the CAA, which are known or suspected of causing cancer or other serious health effects. The federal HAPs are listed on the U.S. EPA website at <http://www.epa.gov/ttn/atw/orig189.html>. In order to implement the CAA, approximately 100 National Emission Standards for Hazardous Air Pollutants (NESHAPs) have been promulgated by U.S. EPA for major sources (sources emitting greater than 10 tpy of a single HAP or greater than 25 tpy of multiple HAPs). SCAQMD can either directly implement NESHAPs or adopt rules that contain requirements at least as stringent as the NESHAP requirements. However, since NESHAPs often apply to sources in the Basin that are controlled, many of the sources that would have been subject to federal requirements already comply or are exempt.

In addition to the major source NESHAPs, U.S. EPA has also controlled HAPs from urban areas by developing Area Source NESHAPs under their Urban Air Toxics Strategy. U.S. EPA defines an area source as a source that emits less than 10 tons annually of any single hazardous air pollutant or less than 25 tons annually of a combination of hazardous air pollutants. The CAA requires the U.S. EPA to identify a list of at least 30 air toxics that pose the greatest potential health threat in urban areas. U.S. EPA is further required to identify and establish a list of area source categories that represent 90 percent of the emissions of the 30 urban air toxics associated with area sources, for which Area Source NESHAPs are to be developed under the CAA. U.S. EPA has identified a total of 70 area source categories with regulations promulgated for more than 30 categories so far.

The federal toxics program recognizes diesel engine exhaust (diesel particulate matter or DPM) as a health hazard, however, DPM itself is not one of their listed toxic air contaminants. Rather, each toxic compound in the speciated list of compounds in exhaust is considered separately. Although there are no specific NESHAP regulations for DPM, DPM reductions are realized through federal regulations including diesel fuel standards and emission standards for stationary, marine, and locomotive engines; and idling controls for locomotives.

### ***State***

The California air toxics program was based on the CAA and the original federal list of hazardous air pollutants. The state program was established in 1983 under the Toxic Air Contaminant Identification and Control Act, Assembly Bill (AB) 1807, Tanner. Under the state program, toxic air contaminants are identified through a two-step process of risk identification and risk management. This two-step process was designed to protect residents from the health effects of toxic substances in the air.

**Control of TACs under the TAC Identification and Control Program:** California's TAC identification and control program, adopted in 1983 as AB 1807, is a two-step program in which substances are identified as TACs and ATCMs are adopted to control emissions from specific



sources. CARB has adopted a regulation designating all 188 federal hazardous air pollutants (HAPs) as TACs.

ATCMs are developed by CARB and implemented by SCAQMD and other air districts through the adoption of regulations of equal or greater stringency. Generally, the ATCMs reduce emissions to achieve exposure levels below a determined health threshold. If no such threshold levels are determined, emissions are reduced to the lowest level achievable through the best available control technology unless it is determined that an alternative level of emission reduction is adequate to protect public health.

Under California law, a federal NESHAP automatically becomes a state ATCM, unless CARB has already adopted an ATCM for the source category. Once a NESHAP becomes an ATCM, CARB and each air pollution control or air quality management district have certain responsibilities related to adoption or implementation and enforcement of the NESHAP/ATCM.

**Control of TACs under the Air Toxics "Hot Spots" Act:** The Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588) establishes a statewide program to inventory and assess the risks from facilities that emit TACs and to notify the public about significant health risks associated with the emissions. Facilities are phased into the AB 2588 program based on their emissions of criteria pollutants or their occurrence on lists of toxic emitters compiled by SCAQMD. Phase I consists of facilities that emit over 25 tons per year of any criteria pollutant and facilities present on SCAQMD's toxics list. Phase I facilities entered the program by reporting their TAC emissions for calendar year 1989. Phase II consists of facilities that emit between 10 and 25 tpy of any criteria pollutant, and submitted air toxic inventory reports for calendar year 1990 emissions. Phase III consists of certain designated types of facilities which emit less than 10 tons per year of any criteria pollutant, and submitted inventory reports for calendar year 1991 emissions. Inventory reports are required to be updated every four years under the state law.

**Air Toxics Control Measures:** As part of its risk management efforts, CARB has passed state ATCMs to address air toxics from mobile and stationary sources. Some key ATCMs for stationary sources include reductions of benzene emissions from service stations, hexavalent chromium emissions from chrome plating, perchloroethylene emissions from dry cleaning, ethylene oxide emissions from sterilizers, and multiple air toxics from the automotive painting and repair industries.

Many of CARB's recent ATCMs are part of the CARB Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles (Diesel Risk Reduction Plan) which was adopted in September 2000 (<http://www.arb.ca.gov/diesel/documents/rrpapp.htm>) with the goal of reducing DPM emissions from compression ignition engines and associated health risk by 75 percent by 2010 and 85 percent by 2020. The Diesel Risk Reduction Plan includes strategies to reduce emissions from new and existing engines through the use of ultra-low sulfur diesel fuel, add-on controls, and engine replacement. In addition to stationary source engines, the plan addresses DPM emissions from mobile sources such as trucks, buses, construction equipment, locomotives, and ships.

**OEHHA Health Risk Assessment Guidelines:** In 2003, OEHHA developed and approved its Health Risk Assessment Guidance document (2003 OEHHA Guidelines) and prepared a series of Technical Support Documents, reviewed and approved by the Scientific Review Panel (SRP), that provided new scientific information showing that early-life exposures to air toxics contribute to an increased estimated lifetime risk of developing cancer and other adverse health effects, compared to exposures that occur in adulthood. As a result, OEHHA developed the Revised OEHHA Guidelines in March 2015 which incorporated this new scientific information. The new method utilizes higher estimates of cancer potency during early life exposures. There are also differences in the assumptions on breathing rates and length of residential exposures.

### **SCAQMD**

SCAQMD has regulated criteria air pollutants using either a technology-based or an emissions limit approach. The technology-based approach defines specific control technologies that may be installed to reduce pollutant emissions. The emissions limit approach establishes an emission limit, and allows industry to use any emission control equipment, as long as the emission requirements are met. The regulation of TACs often uses a health risk-based approach, but may also require a regulatory approach similar to criteria pollutants, as explained in the following subsections.

**Rules and Regulations:** Under SCAQMD's toxic regulatory program there are 23 source-specific rules that target toxic emission reductions that regulate over 10,000 sources such as metal finishing, spraying operations, dry cleaners, film cleaning, gasoline dispensing, and diesel-fueled stationary engines to name a few. In addition, other source-specific rules targeting criteria pollutant reductions also reduce toxic emissions, such as Rule 461 – Gasoline Transfer and Dispensing which reduces benzene emissions from gasoline dispensing and Rule 1124 – Aerospace Assembly and Component Manufacturing Operations which reduces perchloroethylene, trichloroethylene, and methylene chloride emissions from aerospace operations.

New and modified sources of toxic air contaminants in the SCAQMD are subject to Rule 1401 - New Source Review of Toxic Air Contaminants and Rule 212 - Standards for Approving Permits. Rule 212 requires notification of SCAQMD's intent to grant a permit to construct a significant project, defined as a new or modified permit unit located within 1000 feet of a school (a state law requirement under AB 3205), a new or modified permit unit posing a maximum individual cancer risk of one in one million ( $1 \times 10^6$ ) or greater, or a new or modified facility with criteria pollutant emissions exceeding specified daily maximums. Distribution of notice is required to all addresses within a quarter mile radius, or other area deemed appropriate by SCAQMD. Rule 1401 currently controls emissions of carcinogenic and non-carcinogenic (health effects other than cancer) air contaminants from new, modified and relocated sources by specifying limits on cancer risk and hazard index (explained further in the following discussion), respectively. The rule lists nearly 300 TACs that are evaluated during SCAQMD's permitting process for new, modified or relocated sources. During the past decade, more than ten compounds have been added or had risk values amended. The addition of DPM from diesel-fueled internal combustion engines as a TAC in March 2008 was the most significant of recent amendments to the rule. Rule 1401.1 –

Requirements for New and Relocated Facilities Near Schools sets risk thresholds for new and relocated facilities near schools. The requirements are more stringent than those for other air toxics rules in order to provide additional protection to school children.

**Air Toxics Control Plan:** On March 17, 2000, the SCAQMD Governing Board approved the Air Toxics Control Plan (2000 ATCP) which was the first comprehensive plan in the nation to guide future toxic rulemaking and programs. The ATCP was developed to lay out SCAQMD's air toxics control program which built upon existing federal, state, and local toxic control programs as well as co-benefits from implementation of SIP measures. The concept for the plan was an outgrowth of the Environmental Justice principles and the Environmental Justice Initiatives adopted by SCAQMD Governing Board on October 10, 1997. Monitoring studies and air toxics regulations that were created from these initiatives emphasized the need for a more systematic approach to reducing toxic air contaminants. The intent of the plan was to reduce exposure to air toxics in an equitable and cost-effective manner that promotes clean, healthful air in the SCAQMD. The plan proposed control strategies to reduce TACs in the SCAQMD implemented between years 2000 and 2010 through cooperative efforts of SCAQMD, local governments, CARB and U.S. EPA.

**Cumulative Impact Reduction Strategies (CIRS):** The CIRS was presented to the SCAQMD Governing Board on September 5, 2003 as part of the White Paper on Regulatory Options for Addressing Cumulative Impacts from Air Pollution Emissions. The resulting 25 cumulative impacts strategies were a key element of the Addendum to March 2000 Final Draft Air Toxics Control Plan for Next Ten Years (2004 Addendum). The strategies included rules, policies, funding, education, and cooperation with other agencies. Some of the key SCAQMD accomplishments related to the cumulative impacts reduction strategies were:

- Rule 1401.1 which set more stringent health risk requirements for new and relocated facilities near schools
- Rule 1470 – Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines which established DPM emission limits and other requirements for diesel-fueled engines
- Rule 1469.1 – Spraying Operations Using Coatings Containing Chromium which regulated chrome spraying operations
- Rule 410 – Odor from Transfer Stations and Material Recovery Facilities which addresses odors from transfer stations and material recovery facilities
- Intergovernmental Review comment letters for CEQA documents
- SCAQMD's land use guidance document
- Additional protection in toxics rules for sensitive receptors, such as more stringent requirements for chrome plating operations and diesel engines located near schools

**2004 Addendum:** The 2004 Addendum was adopted by the SCAQMD Governing Board on April 2, 2004 and served as a status report regarding implementation of the various mobile and stationary source strategies in the 2000 ATCP and introduced new measures to further address air toxics. The main elements of the 2004 Addendum were to address the progress made in the implementation of the 2000 ATCP control strategies provide a historical perspective of air toxic

emissions and current air toxic levels; incorporate the CIRS approved in 2003 and additional measures identified in the 2003 AQMP; project future air toxic levels to the extent feasible; and summarize future efforts to develop the next ATP. Significant progress had been made in implementing most of SCAQMD strategies from the 2000 ATP and the 2004 Addendum. CARB has also made notable progress in mobile source measures via its Diesel Risk Reduction Plan, especially for goods movement related sources, while the U.S. EPA continued to implement their air toxic programs applicable to stationary sources.

**Clean Communities Plan:** On November 5, 2010, the SCAQMD Governing Board approved the 2010 Clean Communities Plan (CCP). The CCP was an update to the 2000 ATP and the 2004 Addendum. The objective of the 2010 CCP was to reduce the exposure to air toxics and air-related nuisances throughout the SCAQMD, with emphasis on cumulative impacts. The elements of the 2010 CCP are community exposure reduction, community participation, communication and outreach, agency coordination, monitoring and compliance, source-specific programs, and nuisance. The centerpiece of the 2010 CCP is a pilot study through which SCAQMD staff works with community stakeholders to identify and develop solutions community-specific to air quality issues in two communities: (1) the City of San Bernardino; and (2) Boyle Heights and surrounding areas.

**Control of TACs under the Air Toxics "Hot Spots" Act:** On October 2, 1992, the SCAQMD Governing Board adopted public notification procedures for Phase I and II facilities. These procedures specify that AB 2588 facilities must provide public notice when exceeding the following risk levels:

- Maximum Individual Cancer Risk: greater than 10 in one million ( $10 \times 10^6$ )
- Total Hazard Index: greater than 1.0 for TACs except lead, or  $> 0.5$  for lead

Public notice is to be provided by letters mailed to all addresses and all parents of children attending school in the impacted area. In addition, facilities must hold a public meeting and provide copies of the facility risk assessment in all school libraries and a public library in the impacted area.

The AB 2588 Toxics "Hot Spots" Program is implemented through Rule 1402 - Control of Toxic Air Contaminants from Existing Sources. SCAQMD continues to review health risk assessments submitted. Notification is required from facilities with a significant risk under the AB 2588 program based on their initial approved health risk assessments and will continue on an ongoing basis as additional and subsequent health risk assessments are reviewed and approved.

There are currently about 361 facilities in SCAQMD's AB 2588 program. Since 1992 when the state Health and Safety Code incorporated a risk reduction requirement in the program, SCAQMD has reviewed and approved over 335 HRAs; 50 facilities were required to do a public notice and 24 facilities were subject to risk reduction. Currently, over 96 percent of the facilities in the program have cancer risks below ten in a million and over 97 percent have acute and chronic hazard indices of less than one (SCAQMD, 2015a).

**CEQA Intergovernmental Review Program:** SCAQMD staff, through its Intergovernmental Review (IGR) provides comments to lead agencies on air quality analyses and mitigation measures in CEQA documents. The following are some key programs and tools that have been developed more recently to strengthen air quality analyses, specifically as they relate to exposure of mobile source air toxics:

- SCAQMD’s Mobile Source Committee approved the “Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Emissions” (August 2002). This document provides guidance for analyzing cancer risks from DPM from truck idling and movement (e.g., truck stops, warehouse and distribution centers, or transit centers), ship hoteling at ports, and train idling.
- CalEPA and CARB’s “Air Quality and Land Use Handbook: A Community Health Perspective” (April 2005), provides recommended siting distances for incompatible land uses.
- Western Riverside Council of Governments’ Regional Air Quality Task Force developed a policy document titled, “Good Neighbor Guidelines for Siting New and/or Modified Warehouse/Distribution Facilities” (September 2005). This document provides guidance to local government on preventive measures to reduce neighborhood exposure to toxic air contaminants from warehousing facilities.

**Environmental Justice (EJ):** Environmental justice has long been a focus of SCAQMD. In 1990, SCAQMD formed an Ethnic Community Advisory Group that was restructured as the Environmental Justice Advisory Group (EJAG) in 2008. EJAG’s mission is to advise and assist SCAQMD in protecting and improving public health in SCAQMD’s most impacted communities through the reduction and prevention of air pollution.

In 1997, the SCAQMD Governing Board adopted four guiding principles and ten initiatives (<http://www.aqmd.gov/ej/history.htm>) to ensure environmental equity. Also in 1997, the SCAQMD Governing Board expanded the initiatives to include the “Children’s Air Quality Agenda” focusing on the disproportionate impacts of poor air quality on children. Some key initiatives that have been implemented were the Multiple Air Toxics Exposure Studies (MATES, MATES II, MATES III, and MATES IV); the Clean Fleet Rules; CIRS; funding for lower emitting technologies under the Carl Moyer Program; the Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning; a guidance document on Air Quality Issues in School Site Selection; and the 2000 ATCP and its 2004 Addendum. Key initiatives focusing on communities and residents include the Clean Air Congress; the Clean School Bus Program; Asthma and Air Quality Consortium; Brain and Lung Tumor and Air Pollution Foundation; air quality presentations to schools and community and civic groups; and Town Hall meetings. Technological and scientific projects and programs have been a large part of SCAQMD’s EJ program since its inception. Over time, the EJ program’s focus on public education, outreach, and opportunities for public participation have greatly increased. Public education materials and other resources for the public are available on SCAQMD’s website ([www.aqmd.gov](http://www.aqmd.gov))

**AB 2766 Subvention Funds:** AB 2766 subvention funds, money collected by the state as part of vehicle registration and passed through to SCAQMD, is used to fund projects in local cities that reduce motor vehicle air pollutants. The Clean Fuels Program, funded by a surcharge on motor

vehicle registrations in SCAQMD, reduces TAC emissions through co-funding projects that develop and demonstrate low-emission clean fuels and advanced technologies, and to promote commercialization and deployment of promising or proven technologies in Southern California.

**Carl Moyer Program:** Another program that targets diesel emission reductions is the Carl Moyer Program which provides grants for projects that achieve early or extra emission reductions beyond what is required by regulations. Examples of eligible projects include cleaner on-road, off-road, marine, locomotive, and stationary agricultural pump engines. Other endeavors of SCAQMD's Technology Advancement Office help to reduce DPM emissions through co-funding research and demonstration projects of clean technologies, such as low-emitting locomotives.

**Control of TACs with Risk Reduction Audits and Plans:** Senate Bill (SB) 1731, enacted in 1992 and codified in Health and Safety Code § 44390 et seq., amended AB 2588 to include a requirement for facilities with significant risks to prepare and implement a risk reduction plan which will reduce the risk below a defined significant risk level within specified time limits. SCAQMD Rule 1402 was adopted on April 8, 1994 to implement the requirements of SB 1731.

In addition to the TAC rules adopted by SCAQMD under authority of AB 1807 and SB 1731, SCAQMD has adopted source-specific TAC rules, based on the specific level of TAC emitted and the needs of the area. These rules are similar to the state's ATCMs because they are source-specific and only address emissions and risk from specific compounds and operations.

### ***Multiple Air Toxics Exposure Studies***

Multiple Air Toxics Exposure Study (MATES): In 1986, SCAQMD conducted the first MATES report to determine the Basin-wide risks associated with major airborne carcinogens. At the time, the state of technology was such that only 20 known air toxic compounds could be analyzed and diesel exhaust particulate did not have an agency accepted carcinogenic health risk value. TACs are determined by U.S. EPA, and by CalEPA, including OEHHA and CARB. For purposes of MATES, the California carcinogenic health risk factors were used. The maximum combined individual health risk for simultaneous exposure to pollutants under the study was estimated to be 600 to 5,000 in one million.

Multiple Air Toxics Exposure Study II (MATES II): At its October 10, 1997 meeting, the SCAQMD Governing Board directed staff to conduct a follow up to the MATES report to quantify the magnitude of population exposure risk from existing sources of selected air toxic contaminants at that time. MATES II included a monitoring program of 40 known air toxic compounds, an updated emissions inventory of toxic air contaminants (including microinventories around each of the 14 microscale sites), and a modeling effort to characterize health risks from hazardous air pollutants. The estimated Basin-wide carcinogenic health risk from ambient measurements was 1,400 per million people. About 70 percent of the Basin-wide health risk was attributed to DPM emissions; about 20 percent to other toxics associated with mobile sources (including benzene, butadiene, and formaldehyde); about 10 percent of Basin-wide health risk was attributed to stationary sources (which include industrial sources and other certain specifically identified commercial businesses such as dry cleaners and print shops.)

**Multiple Air Toxics Exposure Study III (MATES III):** MATES III was part of the SCAQMD Governing Board's 2003-04 Environmental Justice Workplan approved on September 5, 2003. The MATES III report consisted of several elements including a monitoring program, an updated emissions inventory of toxic air contaminants, and a modeling effort to characterize carcinogenic health risk across the Basin. Besides toxics, additional measurements included organic carbon, elemental carbon, and total carbon, as well as, Particulate Matter (PM), including PM<sub>2.5</sub>. It did not estimate mortality or other health effects from particulate exposures. MATES III revealed a general downward trend in air toxic pollutant concentrations with an estimated Basin-wide lifetime carcinogenic health risk of 1,200 in one million. Mobile sources accounted for 94 percent of the basin-wide lifetime carcinogenic health risk with diesel exhaust particulate contributing to 84 percent of the mobile source Basin-wide lifetime carcinogenic health risk. Non-diesel carcinogenic health risk declined by 50 percent from the MATES II values.

**Multiple Air Toxics Exposure Study IV (MATES IV):** MATES IV, the current version, includes a monitoring program, an updated emissions inventory of toxic air contaminants, and a modeling effort to characterize risk across the Basin. The study focuses on the carcinogenic risk from exposure to air toxics but does not estimate mortality or other health effects from particulate exposures. An additional focus of MATES IV is the inclusion of measurements of ultrafine particle concentrations. MATES IV incorporates the updated health risk assessment methodology from OEHHA. Compared to previous studies of air toxics in the Basin, this study found decreasing air toxics exposure, with the estimated Basin-wide population-weighted risk down by about 57 percent from the analysis done for the MATES III time period. The ambient air toxics data from the ten fixed monitoring locations also demonstrated a similar reduction in air toxic levels and risks. On average, diesel particulate contributes about 68 percent of the total air toxics risk. This is a lower portion of the overall risk compared to the MATES III estimates of about 84 percent.

### **Health Effects**

**Carcinogenic Health Risks from TACs:** One of the primary health risks of concern due to exposure to TACs is the risk of contracting cancer. The carcinogenic potential of TACs is a particular public health concern because it is currently believed by many scientists that there is no "safe" level of exposure to carcinogens. Any exposure to a carcinogen poses some risk of causing cancer. It is currently estimated that about one in four deaths in the United States is attributable to cancer. The proportion of cancer deaths attributable to air pollution has not been estimated using epidemiological methods.

**Non-Cancer Health Risks from TACs:** Unlike carcinogens, for most non-carcinogens it is believed that there is a threshold level of exposure to the compound below which it will not pose a health risk. CalEPA's OEHHA develops Reference Exposure Levels (RELs) for TACs which are health-conservative estimates of the levels of exposure at or below which health effects are not expected. The non-cancer health risk due to exposure to a TAC is assessed by comparing the estimated level of exposure to the REL. The comparison is expressed as the ratio of the estimated exposure level to the REL, called the hazard index (HI).

## **CHAPTER 4**

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### **Environmental Impacts**

**Introduction**

**Potential Significant Environmental Impacts and Mitigation Measures**

**Cumulative Environmental Impacts**

**Potential Environmental Impacts Found Not to be Significant**

**Significant Environmental Effects Which Cannot Be Avoided**

**Significant Irreversible Environmental Changes**

**Potential Growth-Inducing Impacts**

**Relationship Between Short-Term Uses and Long-Term Productivity**



## INTRODUCTION

The CEQA Guidelines require environmental documents to identify significant environmental effects that may result from a proposed project (CEQA Guidelines § 15126.2(a)). Direct and indirect significant effects of a project on the environment should be identified and described, with consideration given to both short- and long-term impacts. The discussion of environmental impacts may include, but is not limited to: the resources involved; physical changes; alterations of ecological systems; health and safety problems caused by physical changes; and, other aspects of the resource base, including water, scenic quality, and public services. If significant adverse environmental impacts are identified, the CEQA Guidelines require a discussion of measures that could either avoid or substantially reduce any adverse environmental impacts to the greatest extent feasible (CEQA Guidelines § 15126.4).

The categories of environmental impacts to be studied in a CEQA document are established by CEQA [Public Resources Code § 21000 *et seq.*], and the CEQA Guidelines, as codified in Title 14 California Code of Regulations § 15000 *et seq.* Under the CEQA Guidelines, there are approximately 17 environmental categories in which potential adverse impacts from a project are evaluated. The Initial Study is designed to evaluate the project and identify those environmental categories that may be adversely affected by a project and to be further analyzed in a subsequent CEQA document.

The CEQA Guidelines also indicate that the degree of specificity required in a CEQA document depends on the type of project being proposed (CEQA Guidelines § 15146). The detail of the environmental analysis for certain types of projects cannot be as great as for others. As explained in Chapter 1, the analysis of PAR 1147 indicated that the type of CEQA document appropriate for the proposed project is a SEA. Due to the large number and wide variety of affected sources (e.g., up to 5,650) at 3,900 existing facilities, this SEA analyzes the environmental impacts by equipment category.

## POTENTIAL SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Pursuant to CEQA, a NOP/IS, including an environmental checklist, was prepared for this project (see Appendix B). Of the 17 potential environmental impact categories contained in the environmental checklist, only the topic of operational air quality was identified as having potentially significant adverse impacts requiring further review. Following the release of the NOP/IS, further analysis of the proposed project indicated that the preparation of a SEA, in lieu of an EA, would be the appropriate document to analyze the potentially significant operational air quality impacts associated with PAR 1147 because new information of substantial importance, which was not known and could not have been known at the time the December 2008 Final EA and September 2011 Final SEA were certified, became available (CEQA Guidelines § 15162(a)(3)). Further, PAR 1147 is expected to have same significant adverse effects to the topic of operational air quality that were identified in the NOP/IS, but that were not discussed in the previous December 2008 Final EA or September 2011 Final SEA (CEQA Guidelines §

15162(a)(3)(A)). Thus, the topic of operational air quality is further evaluated in this SEA. The environmental impact analysis for this environmental topic area incorporates a “worst-case” approach. This approach entails the premise that whenever the analysis requires that assumptions be made, those assumptions that result in the greatest adverse impacts are typically chosen. This method ensures that all potential effects of the proposed project are documented for the decision-makers and the public. Accordingly, the following analyses use a conservative “worst-case” approach for analyzing the potentially significant adverse operational air quality impacts associated with the implementation of the proposed project.

## AIR QUALITY

PAR 1147 will resolve current Rule 1147 NOx emissions compliance issues that have been raised by businesses. Up to 3,900 existing facilities (4,900 to 5,650 out of 6,400 existing units) within SCAB will be affected by PAR 1147. PAR 1147 proposes to extend the compliance dates for small and low use equipment based on a longer equipment lifetime, change the emission limits for certain specific equipment to address technical feasibility of meeting a 30 ppm NOx limit, add a testing exemption, and clarify exemptions for certain equipment. Therefore, initial analysis of PAR 1147 is expected to result in NOx emission reductions foregone of up to 0.9 ton per day starting in 2017. However, while most of the NOx emission reductions foregone will be eventually recaptured because the existing affected units will be regularly replaced and upgraded over time, approximately 0.03 ton per day of NOx emission reductions will be permanently foregone. Nonetheless, the amount of NOx emission reductions foregone is expected to exceed the SCAQMD's significance operational air quality threshold for NOx (e.g., 55 pounds per day); thus, implementation of PAR 1147 would be expected to have significant adverse operational air quality impacts. No other environmental topic area was identified as having potentially significant adverse impacts if PAR 1147 is implemented.

For this reason, the proposed changes contained in PAR 1147 are considered to contain new information of substantial importance, which was not known and could not have been known at the time the previously CEQA documents for Rule 1147 (e.g., the December 2008 Final EA and the September 2011 Final SEA) were certified. Specifically, because the quantity of NOx emission reductions foregone would exceed the SCAQMD's significance operational air quality threshold for NOx (e.g., 55 pounds per day) and that these effects were not discussed in the previously certified CEQA documents, PAR 1147 will create a new significant effects to operational air quality that need to be further evaluated in this SEA per CEQA Guidelines § 15162(a)(3)(A). Thus, only the topic of operational air quality has been analyzed in this SEA.

## Significance Criteria

To determine whether air quality impacts from adopting and implementing the proposed project are significant, impacts will be evaluated and compared to the following criteria. If impacts exceed any of the significance thresholds in Table 4-1, they will be considered significant. All feasible mitigation measures will be identified and implemented to reduce significant impacts to the maximum extent feasible. PAR 1147 will be considered to have significant adverse air quality impacts if any one of the thresholds in Table 4-1 are equaled or exceeded.

**Table 4-1**  
**SCAQMD Air Quality Significance Thresholds**

Mass Daily Thresholds <sup>a</sup>		
Pollutant	Construction <sup>b</sup>	Operation <sup>c</sup>
NO <sub>x</sub>	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM <sub>10</sub>	150 lbs/day	150 lbs/day
PM <sub>2.5</sub>	55 lbs/day	55 lbs/day
SO <sub>x</sub>	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
Toxic Air Contaminants (TACs), Odor, and GHG Thresholds		
TACs (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic & Acute Hazard Index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
GHG	10,000 MT/yr CO <sub>2</sub> eq for industrial facilities	
Ambient Air Quality Standards for Criteria Pollutants <sup>d</sup>		
NO <sub>2</sub>  1-hour average annual arithmetic mean	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.03 ppm (state) and 0.0534 ppm (federal)	
PM <sub>10</sub> 24-hour average annual average	10.4 µg/m <sup>3</sup> (construction) <sup>e</sup> & 2.5 µg/m <sup>3</sup> (operation) 1.0 µg/m <sup>3</sup>	
PM <sub>2.5</sub> 24-hour average	10.4 µg/m <sup>3</sup> (construction) <sup>e</sup> & 2.5 µg/m <sup>3</sup> (operation)	
SO <sub>2</sub> 1-hour average 24-hour average	0.25 ppm (state) & 0.075 ppm (federal – 99 <sup>th</sup> percentile) 0.04 ppm (state)	
Sulfate 24-hour average	25 µg/m <sup>3</sup> (state)	
CO  1-hour average 8-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) and 35 ppm (federal) 9.0 ppm (state/federal)	
Lead  30-day Average Rolling 3-month average	1.5 µg/m <sup>3</sup> (state) 0.15 µg/m <sup>3</sup> (federal)	

<sup>a</sup> Source: SCAQMD CEQA Handbook (SCAQMD, 1993)

<sup>b</sup> Construction thresholds apply to both the South Coast Air Basin and Coachella Valley (Salton Sea and Mojave Desert Air Basins).

<sup>c</sup> For Coachella Valley, the mass daily thresholds for operation are the same as the construction thresholds.

<sup>d</sup> Ambient air quality thresholds for criteria pollutants based on SCAQMD Rule 1303, Table A-2 unless otherwise stated.

<sup>e</sup> Ambient air quality threshold based on SCAQMD Rule 403.

KEY:    lbs/day = pounds per day      ppm = parts per million       $\mu\text{g}/\text{m}^3$  = microgram per cubic meter       $\geq$  = greater than or equal to  
           MT/yr CO<sub>2</sub>eq = metric tons per year of CO<sub>2</sub> equivalents       $>$  = greater than

Revision: March 2015

In general, the SCAQMD makes significance determinations for construction impacts based on the maximum or peak daily emissions during the construction period, which provides a “worst-case” analysis of the construction emissions. However, as explained previously, no construction activities are associated with implementing PAR 1147, so the construction significance thresholds do not apply to this project. Similarly, significance determinations for operational emissions are based on the maximum or peak daily allowable emissions during the operational phase.

### **Project-Specific Air Quality Impacts During Operation**

PAR 1147 will provide relief to businesses by extending the compliance dates for small and low use equipment. Compliance dates will be extended for the expected life of these units (35 years) or when the equipment is replaced, rebuilt or moved to a different facility. This change will reduce compliance cost for affected businesses. The amendment will also change the emission limit for specific categories of equipment (e.g., incinerator section of burn off ovens and small units less than 325,000 BTU/hour) to address technical feasibility of meeting a 30 ppm NO<sub>x</sub> limit. Therefore, it is not expected that the affected facilities will need to change their current operations in order to comply with PAR 1147. However, most NO<sub>x</sub> emission reductions for PAR 1147 will be delayed and will result in NO<sub>x</sub> emissions foregone of up to 0.9 ton per day starting in 2017 as a result of an increase in the allowable NO<sub>x</sub> ppm limit, exempt some units, and extending the compliance date. However, while most of the NO<sub>x</sub> emission reductions foregone will be eventually recaptured because the existing units will be regularly replaced and upgraded over time, approximately 0.03 ton per day of the NO<sub>x</sub> emission reductions foregone will be permanent.

NO<sub>x</sub> emission reductions foregone from equipment subject to Rule 1147 is estimated using information on typical use provided by operators visited by SCAQMD staff and potential to emit (PTE) for affected units in SCAQMD records. Based on natural gas consumptions, business owners and equipment vendors indicate typical automotive booths and other booth operations at maintenance facilities, businesses that repair non-automotive equipment, and other specialty shops have emissions of less than one third pound (0.3 pound) NO<sub>x</sub> each day they operate. However, many booths have greater emissions because they are used for manufacturing operations with one or more shifts per day. Up to 200 booths used in manufacturing and other large coating applications may have emissions of a pound per day or more. In addition, while many auto body shops do not paint cars every day during the week, larger operations can operate two shifts per day.

Based on this information, the 3,400 permitted booths and spray stations have emissions of about 0.5 ton NO<sub>x</sub> per day (= [3,400 units X approximately 0.3 pound NO<sub>x</sub>/day per all booth types]/[2000 pounds/ton]). About 1,500 other types of combustion equipment including, but not limited to, ovens, dryers, and furnaces have PTE of less than one pound of NO<sub>x</sub> per day. Because there is a wide distribution of PTE estimated for these other types of equipment, average emissions from each of these units is assumed to be 0.5 pound of NO<sub>x</sub> per day for a total of 0.4 ton NO<sub>x</sub> per day (= [1,500 units X 0.5 pound NO<sub>x</sub>/day]/[2,000 pounds/ton]). An additional 750 units with a PTE of one pound of NO<sub>x</sub> per day or greater per unit may have actual emissions less than one pound of NO<sub>x</sub> per day. The estimated emissions from these 750 units is about 0.3 ton NO<sub>x</sub> per day (= [750 units X 0.8 pound NO<sub>x</sub>/day]/[2,000 pounds/ton]).

Based on this approach, the approximately 4,900 to 5,650 units that may be affected by PAR 1147 and that have a PTE of less than one pound of NOx per day per unit is estimated to emit about 0.9 to 1.2 tons of NOx per day. The majority of equipment with emissions less than one pound of NOx per day are subject to a 30 ppm NOx emission limit which would reduce emissions by about 71 percent. However, a much smaller number of equipment that would be subject to a 60 ppm NOx limit and the emission reductions would be about 41 percent. Assuming a 66 percent reduction for the combination of equipment emission reductions of 41 percent to 71 percent, for the 4,900 to 5,650 units, the overall NOx emission reductions foregone is expected to range between approximately 0.6 (excluding the 750 other units that may have emissions less than 1 pound per day) to 0.9 ton per day. Table 4-2 contains a summary of the estimated emissions reduction foregone for each source category and the overall total. Of the emission reductions foregone as presented in Table 4-2, while most will eventually be recovered over time, a small portion will be permanently foregone. Thus, Table 4-3 presents a summary of the estimated portion of emission reductions for each source category that will be permanently foregone. NOx is the only pollutant that is affected by the PAR 1147 because the focus of Rule 1147 is to reduce NOx emissions. As shown in Table 4-2, the quantity of peak daily operational NOx emission reductions delayed exceeds the SCAQMD's CEQA significance threshold for operation. Thus, PAR 1147 will result in significant adverse operational air quality impacts for NOx.

**Table 4-2**  
**Estimated NOx Emission Reductions Foregone**

Source Category	Estimated NOx emissions per unit (lb/day)	Estimated number of units	Total estimated NOx emissions (ton/day)	66% of NOx emission reductions foregone per 60 ppm NOx limit (ton/day)	71% of NOx emission reductions foregone per 30 ppm NOx limit (ton/day)
Booths and spray stations	0.3	3,400	0.5	0.3	0.4
Ovens, dryers, furnaces, etc.) with emissions less than 1 pound per day	0.5	1,500	0.4	0.3	0.3
Other units that may have emissions less than 1 pound per day	0.8	750	0.3	0.2	0.2
<b>TOTAL</b>	N/A	5,650	1.2	<b>0.8</b>	<b>0.9</b>
SIGNIFICANCE THRESHOLD*	N/A	N/A	N/A	0.0275	0.0275
SIGNIFICANT?	N/A	N/A	N/A	YES	YES

Notes:

N/A: Not Applicable

\* The NOx significance threshold for operation is 55 pounds per day which is equivalent to 0.0275 ton per day.

**Table 4-3**  
**Estimated Permanent NOx Emission Reductions Foregone**

<u>Equipment Category</u>	<u>Estimated Number of Units Requiring Permits</u>	<u>Estimated Number of Additional (New) Units Requiring Permits</u>	<u>Estimated NOx Emission Reductions Permanently Foregone as Compared to Baseline (pounds/day)</u>
<u>Low Temp Afterburners</u>	<u>25</u>	<u>5</u>	<u>12</u>
<u>Units &lt; 325,000 BTU/hour</u>	<u>165</u>	<u>82</u>	<u>49</u>
<b><u>TOTAL</u></b>			<b><u>61</u></b>

Note: At the time of the release of the Draft SEA, the estimate of 0.9 tons per day of NO<sub>x</sub> emission reductions foregone included a portion of emissions attributed to the low temperature afterburners that would be permanently foregone. However, the analysis in the Draft SEA for low temperature afterburners did not specifically identify the quantity of permanent NO<sub>x</sub> emission reductions foregone that would be attributed to this equipment category (e.g., 12 pounds per day). Therefore, it is added here for clarification purposes. In addition, at the time of the release of the Draft SEA, the project contained a proposal to increase the NO<sub>x</sub> compliance limit for low temperature ovens and other units with a heat rating less than 325,000 BTU per hour and the NO<sub>x</sub> emission reductions foregone for these equipment categories were also included in the total estimate of 0.9 tons per day of NO<sub>x</sub> emission reductions foregone. However, subsequent to the release of the Draft SEA, the proposed project was modified to instead exempt all units with heat rating of less than 325,000 BTU per hour. This revision resulted in an additional 49 pounds per day of permanent NO<sub>x</sub> emission reductions foregone from units with a heat rating less than 325,000 BTU per hour and are considered new impacts since the release of the Draft SEA.

**Table 4-34**  
**Estimated NOx Emission Reductions Foregone Per Compliance Year**

<b>Compliance Year</b>	<b>NOx Emission Reductions Foregone due to PAR 1147 (ton/day)</b>
2017	0.90
2018	0.87
2019	<u>0.84</u> 0.83
2020	<u>0.80</u> 0.80
2021	<u>0.77</u> 0.77
2022	<u>0.74</u> 0.73
2023	<u>0.71</u> 0.70
2024	<u>0.67</u> 0.67
2025	<u>0.64</u> 0.63
2026	<u>0.61</u> 0.60
2027	<u>0.58</u> 0.57
2028	<u>0.55</u> 0.53
2029	<u>0.51</u> 0.50
2030	<u>0.48</u> 0.47
2031	<u>0.45</u> 0.43
2032	<u>0.42</u> 0.40
2033	<u>0.38</u> 0.37
2034	<u>0.35</u> 0.33
2035	<u>0.32</u> 0.30
2036	<u>0.29</u> 0.27
2037	<u>0.26</u> 0.23
2038	<u>0.22</u> 0.20
2039	<u>0.19</u> 0.17
2040	<u>0.16</u> 0.13
2041	<u>0.13</u> 0.10
2042	<u>0.10</u> 0.07
2043	<u>0.06</u> 0.03
<b><u>2044 and beyond</u></b>	<b><u>0.03</u>0</b>

The baseline emissions inventory for PAR 1147 is the inventory that was used for the 2008 rule adoption. By proposing to delay some of the compliance dates and to exempt some units in PAR 1147, there will be adjustments to the annual operational NOx emission reductions during varying compliance years. Table 4-3 presents the estimated amount of NOx emission reductions that will be permanently foregone, which is a subset of the total NOx emission reductions presented in Table 4-2. Table 4-3-4 summarizes the estimated amount of potential NOx emission reductions foregone between 2017 and 2044 and beyond, as a result of the delayed compliance dates and the exemption of certain units contained in PAR 1147.

As shown in Table 4-34, the air quality analysis for PAR 1147 indicates that NOx emission reductions delayed during operation will continue to exceed the NOx operational significance threshold for each compliance year in 2017 and beyond. Thus, the operational air quality impacts from implementing PAR 1147 are considered to be significant. If significant adverse environmental impacts are identified in a CEQA document, the CEQA document shall describe feasible measures that could minimize the impacts of the proposed project. However, since PAR 1147 contains adjustments to compliance dates for certain types of equipment and alternatives to the project that are either the ‘no project’ alternative, or different adjustments to the compliance dates than what is proposed in PAR 1147 (see Chapter 5), there are no feasible mitigation measures that would eliminate or reduce the significant adverse operational air quality impacts for NOx emissions to less than significant levels.

It is important to note that because PAR 1147 focuses on reducing NOx emissions, emissions of other criteria pollutants (e.g., CO, VOC, SOx, PM10, and PM2.5) and toxic air contaminants are not expected to change as a result of PAR 1147 compared with the current requirements for the affected sources under Rule 1147. Thus, PAR 1147 will not result in significant adverse operational air quality impacts for CO, VOC, SOx, PM10, PM2.5 and toxic air contaminants.

## **CUMULATIVE ENVIRONMENTAL IMPACTS**

The cumulative secondary impacts associated with the extended compliance dates and equipment replacement schedules and changes in emission limits of NOx as contained in PAR 1147 will have the potential for creating significant adverse operational air quality impacts for NOx that is evaluated in the previous subchapters and presented in Table 4-2, 4-3, and 4-3-4 in the Final SEA. Therefore, adopting PAR 1147 will result in a cumulatively considerable net increase of NOx for which the project region is non-attainment of ozone under NAAQS.

## **POTENTIAL ENVIRONMENTAL IMPACTS FOUND NOT TO BE SIGNIFICANT**

A NOP/IS was initially prepared for the proposed project which included an environmental checklist comprised of approximately 17 environmental topic areas that identified the potential significant adverse impacts from implementing PAR 1147. The NOP/IS concluded that only the topic of operational air quality would have potential significant adverse impacts that would require further review and these impacts were evaluated and discussed in the previous section. In addition, where the NOP/IS concluded that the project would have no significant or less than significant direct or indirect adverse effects on the remaining environmental topics areas, the conclusions for these environmental topic areas are consistent with the conclusions reached in the previously certified documents (e.g., the December 2008 Final EA and the September 2011 Final SEA) that aside from the topic of operational air quality, there would be no other significant adverse effects from implementing PAR 1147. The screening analysis in the NOP/IS concluded that the following environmental areas would not be significantly adversely affected by the proposed project:

- aesthetics
- air quality during construction and GHGs during construction and operation
- agriculture and forestry resources



- biological resources
- cultural resources
- energy
- geology and soils
- hazards and hazardous materials
- hydrology and water quality
- land use and planning
- mineral resources
- noise
- population and housing
- public services
- recreation
- solid and hazardous waste
- transportation and traffic

The detailed evaluation of the above environmental topic areas is contained in the NOP/IS and is not repeated here (see Appendix B). It is important to note that the SCAQMD received two comment letters relative to the NOP/IS during the 30-day review and comment period from February 1, 2017, to March 3, 2017. SCAQMD staff evaluated these comments and prepared responses. The comment letters received relative to the NOP/IS and the responses to the comments are included in Appendix E of this SEA. In addition, oral comments were presented at the CEQA scoping meeting held on February 21, 2017. Again, SCAQMD staff evaluated these comments and prepared responses. The comments made at the CEQA scoping meeting and the responses to these comments are included in Appendix D of this SEA. None of the comments changed the conclusion of no significant adverse impacts in the NOP/IS for the above environmental topic areas.

## **SIGNIFICANT ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED**

CEQA Guidelines § 15126(b) requires an environmental analysis to consider "any significant environmental effects which cannot be avoided if the proposed project is implemented." This Final SEA identified the topics of air quality impact during operation as the environmental topic area potentially adversely affected by the proposed project. The air quality effects from the operation could not be feasibly mitigated and would result in a significant and unavoidable impact with implementation of the proposed project. This conclusion is also consistent with the finding in the NOP/IS.

## SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

CEQA Guidelines § 15126(c) requires an environmental analysis to consider "any significant irreversible environmental changes which would be involved if the proposed action should be implemented." This Final SEA identified the topic of air quality during operation as the only environmental area potentially adversely affected by the proposed project. Facility operators that replace existing units with compliance equipment according to the compliance schedule in PAR 1147 are likely to operate these units for the lifetime of the equipment.

The proposed changes to PAR 1147 would delay up to 0.90 ton per day (2,000 lbs/day X 0.9 ton = 1,800 lbs) of NOx emission reductions starting in compliance years 2017. These delayed NOx emission reductions will not increase existing emissions, but prevent emission reductions from occurring in the specified years. However, while most of the 0.90 ton per day of NOx ~~delayed~~ emission reductions will be eventually recaptured starting in compliance years 2018 because the existing units will be regularly replaced and upgraded over time, ~~approximately 0.03 ton per day of the NOx emission reductions foregone will be permanent (see Table 4-3).~~ Thus, despite the delay in implementation of some of the compliance dates, ~~the same amount~~ most of the overall NOx emission reductions as estimated in the current rule will be ~~eventually~~ achieved by PAR 1147. Further, even though the projected NOx emission reductions foregone are estimated to be 0.9 ton per day in 2017 and the permanent emission reductions foregone are estimated to be 0.03 ton per day, the 2012 AQMP allocated one ton per day of NOx emissions in the SIP set aside account for every year starting in year 2013 to year 2030 in the event that NOx emission reductions were not achieved via rule adoptions or amendments. This NOx set aside account was re-evaluated and revised in the Final 2016 AQMP based on expected growth and the number of projects expected to take place in near future years to 2.0 tons per day for every year starting in year 2017 to year 2025 and 1.0 ton per day for every year starting in year 2026 to year 2031. As a result, even PAR 1147 would delay NOx emission reductions and exempt some units, implementation of other control measures in the 2016 AQMP will provide human health benefits by reducing population exposures to existing NOx emissions. For these aforementioned reasons, the proposed project would not result in irreversible environmental changes or irretrievable commitment of resources.

## POTENTIAL GROWTH-INDUCING IMPACTS

CEQA Guidelines § 15126(d) requires an environmental analysis to consider the "growth-inducing impact of the proposed action." Implementing the proposed project will not, by itself, have any direct or indirect growth-inducing impacts on businesses in the SCAQMD's jurisdiction because it is not expected to foster economic or population growth or the construction of additional housing and primarily affects existing facilities.

## RELATIONSHIP BETWEEN SHORT-TERM USES AND LONG-TERM PRODUCTIVITY

CEQA documents are required to explain and make findings about the relationship between short-term uses and long-term productivity (CEQA Guidelines § 15065(a)(2)). An important consideration when analyzing the effects of a proposed project is whether it will result in short-term environmental benefits to the detriment of achieving long-term goals or maximizing

productivity of these resources. Implementing the proposed project is not expected to achieve short-term goals at the expense of long-term environmental productivity or goal achievement. The purpose of the proposed project is to provide compliance relief for a limited group of emission sources. Because PAR 1147 will not eliminate all NO<sub>x</sub> emission reductions originally contemplated by the adoption of Rule 1147 in December 2008, by continuing to achieve some emission reductions of NO<sub>x</sub>, which is a precursor to the formation of ozone and PM<sub>2.5</sub>, even if the proposed project is implemented and there will be some temporary NO<sub>x</sub> emission reductions foregone between compliance years 2017 and 2031, the NO<sub>x</sub> emission reductions that will continue to be achieved by other aspects of the rule will continue to help attain federal and state air quality standards which are expected to enhance short and long-term environmental productivity in the region. Implementing the proposed project does not narrow the range of beneficial uses of the environment. Of the potential environmental impacts discussed in Chapter 4, only those related to operational air quality are considered potentially significant.

## **CHAPTER 5**

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### **ALTERNATIVES**

**Introduction**

**Alternatives Rejected as Infeasible**

**Description of Alternatives**

**Comparison of Alternatives**

**Conclusion**

## INTRODUCTION

This Final SEA provides a discussion of alternatives to the proposed project as required by CEQA. Alternatives include measures for attaining objectives of the proposed project and provide a means for evaluating the comparative merits of each alternative. A 'no project' alternative must also be evaluated. The range of alternatives must be sufficient to permit a reasoned choice, but need not include every conceivable project alternative. CEQA Guidelines Section 15126.6(c) specifically notes that the range of alternatives required in a CEQA document is governed by a 'rule of reason' and only necessitates that the CEQA document set forth those alternatives necessary to permit a reasoned choice. The key issue is whether the selection and discussion of alternatives fosters informed decision making and meaningful public participation. A CEQA document need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative. SCAQMD Rule 110 (the rule which implements the SCAQMD's certified regulatory program) does not impose any greater requirements for a discussion of project alternatives in a SEA than is required for an EIR under CEQA.

Four alternatives to the proposed project are summarized in Table 5-1: Alternative A (No Project), Alternative B (More Stringent), Alternative C (Less Stringent), and Alternative D (Least Stringent). Pursuant to the requirements in CEQA Guidelines Section 15126.6(b) to mitigate or avoid the significant effects that a project may have on the environment, a comparison of the potential operational air quality impacts from each of the project alternatives for the individual rule components that comprise the proposed project is provided in Table 5-2. Aside from this environmental topic area, no other significant adverse impacts were identified for the proposed project or any of the project alternatives. The proposed project is considered to provide the best balance between emission reductions and the adverse environmental impacts due to operation activities while meeting the objectives of the project. Therefore, the proposed project is preferred over the project alternatives.

The Governing Board may choose to adopt any portion or all of any alternative presented in the Final SEA with appropriate findings as required by CEQA. The Governing Board is able to adopt any portion or all of any of the alternatives presented because the impacts of each alternative will be fully disclosed to the public and the public will have the opportunity to comment on the alternatives and impacts generated by each alternative. Written suggestions on potential project alternatives received during the comment period for the Draft SEA ~~will be~~were considered when preparing ~~the~~is Final SEA and included in the Appendix F of this Final SEA.

**Table 5-1**  
**Summary of the Proposed Project and Alternatives**

<b>Category</b>		<b>Proposed Project</b>	<b>Alternative A: No Project</b>	<b>Alternative B: More Stringent</b>	<b>Alternative C: Less Stringent</b>	<b>Alternative D: Least Stringent</b>
Equipment with NOx emissions < 1 lb/day	Require compliance with emission limit at specific age	30 years, (less stringent than current rule)	20 years (same as current rule but more stringent than proposed project)	25 years (less stringent than current rule but more stringent than proposed project)	No age requirement (less stringent than current rule and proposed project)	No age requirement (less stringent than current rule and proposed project)
	Demonstration of compliance with NOx emission limit	Applicable to new, replacement and rebuilt units but not to relocation of units by the same company and owner	Applicable to new, replacement and rebuilt units (current rule)	Applicable to new, replacement and rebuilt units (same as current rule)	Applicable to new, replacement and rebuilt units but not to relocation of units by the same company and owners	Compliance with limit is not required if provided that records demonstrate emissions < 1 lb/day. However, if records do not demonstrate < 1 lb/day NOx or records are not kept, then the owner/operator shall demonstrate compliance with unit specific NOx limit.
	Other requirements or exemptions	<del>N/A</del> Further relax limits for units < 325,000 BTU/hour by exempting from any limit	N/A	Require compliance with emission (ppm) limits when multiple similar process units at a facility have combined emissions ≥ 1 lb/day NOx (more stringent than proposed project).	Exempt all pressure washers (less stringent than proposed project) and units ≤ 800 °F and 325,000 BTU/hour from any limit.	Exempt all pressure washers (less stringent than proposed project)- <del>and units &lt; 325,000 BTU/hour from any limit.</del>

**Table 5-2**  
**Comparison of Adverse Environmental Impacts of the Proposed Project and Alternatives**

<b>Category</b>	<b>Proposed Project</b>	<b>Alternative A: No Project</b>	<b>Alternative B: More Stringent</b>	<b>Alternative C: Less Stringent</b>	<b>Alternative D: Least Stringent</b>
<b>Air Quality (during operation)</b>	NOx emission reductions foregone up to 0.9 ton per day. <del>The</del> <u>Most</u> emissions reductions will be recovered over time. <u>Permanent NOx emission reductions foregone up to 0.03 ton per day (see Table 4-3).</u>	No new NOx emission reductions foregone.	NOx emission reductions foregone up to 0.9 ton per day. The emissions reductions foregone will be recovered, but over a shorter time frame than the proposed project.	NOx emission reductions foregone up to 0.9 ton per day. The emissions reductions foregone will be recovered, but over a longer time frame than the proposed project.	Permanent NOx emission reductions foregone up to 0.9 ton per day.
<b>Significance of Air Quality Operational Impacts?</b>	Significant because the amount of NOx emission reductions foregone exceeds the NOx significance threshold of 55 pounds per day.	Not significant, however, compliance may be difficult to achieve for categories of equipment where the proposed project changes emission limits.	Significant because the amount of NOx emission reductions foregone exceeds the NOx significance threshold of 55 pounds per day. (less significant than the proposed project for years 2018 and beyond).	Significant because the amount of NOx emission reductions foregone exceeds the NOx significance threshold of 55 pounds per day. (more significant than the proposed project for years 2018 and beyond).	Significant because the amount of NOx emission reductions foregone exceeds the NOx significance threshold of 55 pounds per day. (more significant than the proposed project for years 2018 and beyond).

## ALTERNATIVES REJECTED AS INFEASIBLE

A CEQA document should identify any alternatives that were considered by the lead agency, but were rejected as infeasible during the scoping process and explain the reasons underlying the lead agency's determination [CEQA Guidelines § 15126.6(c)]. No alternative was specifically rejected as being infeasible.

## DESCRIPTION OF ALTERNATIVES

The following proposed alternatives were developed by modifying specific components of the proposed project. The rationale for selecting and modifying specific components of the proposed project to generate feasible alternatives for the analysis is based on CEQA's requirement to present "realistic" alternatives; that is, alternatives that can actually be implemented.

The initial analysis of the proposed project determined that, of the amendments proposed, only the components that pertain to the delayed compliance schedule to meet certain NOx emission limits and the exempted units could have potential adverse significant impacts during operation. As such, the following four alternatives were developed by identifying and modifying major components of the proposed project. The alternatives, summarized in Table 5-1 and described in the following subsections, include the following: Alternative A (No Project), Alternative B (More Stringent), Alternative C (Less Stringent), and Alternative D (Least Stringent). Unless otherwise specifically noted, all other components of the project alternatives are identical to the components of the proposed project. The following subsections provide a brief description of each alternative.

### **Proposed Project (30 Years Age Requirement, All Units Except the Ones Subject to Emission Limits, Exempt Less Than 325,000 BTU/hour Units):**

The proposed project intended to resolve the compliance issues by changing the emission limits, and compliance dates for certain equipment and exempt some units. Spray booths and small fryers, heated process tanks, evaporators, ovens, dryers, furnaces, afterburners and related devices with emissions less than one pound per day are expected to comply with the applicable NOx emission limits when the equipment reaches 30 years of age. Recovery of the NOx emission reductions foregone are expected to occur starting in 2017 as older equipment gets replaced or retrofitted over time. While most of the NOx emission reductions foregone are expected to be recovered each year based on approximately 0.9 ton/day from compliance year 2017 to 2044, approximately 0.03 ton per day of the NOx emission reductions foregone will be permanent (see Table 4-3).

### **Alternative A: No Project (Current Rule)**

Alternative A, the no project alternative, means that the current version of Rule 1147 that was amended in September 2011 would remain in effect. Under the current version of Rule 1147, spray booths and small fryers, heated process tanks, evaporators, ovens, dryers, furnaces, afterburners and related devices with emissions less than one pound per day would have to comply with the applicable NOx emission limits from 2017 to 2034. Compliance with these NOx limits would result in NOx emission reductions occurring from 2017 through 2034. Under this alternative, however, suppliers cannot provide equipment that meets the applicable NOx emission limits for source small number of equipment and process types, creating potential compliance



issues for some affected facilities, and likely resulting in the originally projected NO<sub>x</sub> emission reductions not being achieved.

**Alternative B: More Stringent Alternative (25 Years Age Requirement):**

Under Alternative B, the age requirement of 25 years is more stringent than the 30 years in the proposed project, PAR 1147. Spray booths and small fryers, heated process tanks, evaporators, ovens, dryers, furnaces, afterburners and related devices with emissions less than one pound per day would have to comply with emission limit starting in 2017. Recovery of the NO<sub>x</sub> emission reductions foregone are expected to occur starting in 2017 as older equipment gets replaced or retrofitted over time. The NO<sub>x</sub> emission reductions foregone are expected to be recovered each year based on approximately 0.9 ton/day from compliance year 2017 to 2039.

**Alternative C: Less Stringent Alternative (No Age Requirement, Exempt Pressure Washers And Low Temperature (Less Than And Equal To 800 °F) And Less Than 325,000 BTU/hour Units):**

Under Alternative C, there is no age requirement. However, the expected equipment life is 35 years which is less stringent than the 30 years age requirement in the proposed project, PAR 1147. Spray booths and small fryers, heated process tanks, evaporators, ovens, dryers, furnaces, afterburners and related devices with emissions less than one pound per day are expected to comply with applicable NO<sub>x</sub> emission limits over the time period of 35 years starting in 2017. Recovery of the NO<sub>x</sub> emission reductions foregone are expected to occur starting in 2017 as older equipment gets replaced or retrofitted over time. ~~The Most~~ NO<sub>x</sub> emission reductions foregone are expected to be recovered each year based on approximately 0.9 ton/day from compliance year 2017 to 2049.

In addition, the total additional permanent NO<sub>x</sub> emission reductions foregone is estimated to be ~~27-36~~ pounds per day from exempting a small number of pressure washers (estimated to be about 10 new units) and plus 49 pounds per day from exempting all units regardless of low-temperature (less than and equal to 800 °F) ovens with burners less than or equal to 325,000 BTU/hour (estimated to be less than 50 82 new units) when compared to the proposed project. Table 5-3 summarizes the estimated amount of the permanent NO<sub>x</sub> emission reductions foregone in Alternative C as compared to the proposed project.

**Table 5-3**  
**Estimated Permanent NO<sub>x</sub> Emission Reductions Foregone in Alternative C**  
**(as Compared to Proposed Project)**

Equipment Category	Estimated Number of Units Requiring Permits	Estimated Number of Additional (New) Units Requiring Permit	Estimated NO <sub>x</sub> Emission Reductions Foregone Compared to Proposed Project (pounds/day)
<del>Spray Pressure Washers</del>	35	10	<del>836</del>
<del>Ovens ≤ All Units &lt; 325,000 BTU/hour</del>	<del>50</del> 165	<del>25</del> 82	<del>15</del> 49
<del>Other Heated Tanks ≤ 325,000 BTU/hour</del>	40	20	4
<b>Total</b>			<b><u>2785</u></b>

**Alternative D: Least Stringent Alternative (Up To 0.9 ton/day Emission Reductions Foregone, No Age Requirement, Exempt Pressure Washers And Less Than 325,000 BTU/hour Units):**

Under Alternative D, there is no age requirement and no emission limit requirement. Spray booths and small fryers, heated process tanks, evaporators, ovens, dryers, furnaces, afterburners and related devices with emissions less than one pound per day would not have to comply with any of the applicable NOx emission limits. Under Alternative D, the NOx emission reductions foregone are not expected to be recovered unless the affected equipment units are replaced or retrofitted due to a failure to demonstrate that the affected unit can achieve NOx emissions at the level less than one pound per day. All of the 0.9 ton per day of NOx emission reductions foregone will be permanently foregone under Alternative D.

**COMPARISON OF ALTERNATIVES**

The following sections describe the potentially significant adverse operational air quality impacts that may occur for each project alternative. Potentially significant adverse operational air quality impacts are quantified where sufficient data are available. A comparison of the environmental impacts for each project alternative is provided in Table 5-2. No other environmental topics other than operational air quality were determined to be significantly adversely affected by implementing any project alternative.

**CONCLUSION**

By not adopting PAR 1147, Alternative A would not delay any of the requirements in the current version of Rule 1147 to comply with the applicable NOx emission limits. Further, implementation of Alternative A will require the same amount of NOx emission reductions to occur as currently required by Rule 1147. However, Alternative A would not achieve the project objectives for the proposed project because some equipment may not be able to comply with the current NOx emission limits by the applicable compliance dates that start in 2017 because compliant equipment is not currently available for certain small low temperature processes. The non-compliant equipment would need to be shut down. Implementing Alternative A means that there will be no delay in obtaining NOx emission reductions and the corresponding health benefits that result from the NOx emission reductions. Thus, Alternative A is the environmentally superior alternative. However, if the “no project” alternative is determined to be the environmentally superior alternative, then the CEQA document shall identify an environmentally superior alternative among the other alternatives (CEQA Guidelines § 15126.6(e)(2)). Lastly, because non-compliant equipment may need to be shut down, Alternative A is determined to be the least toxic alternative.

If Alternative B were implemented, the same NOx emission limits as the proposed project would apply to the affected sources, but a more stringent compliance schedule will be required when compared to the proposed project. Some small units would not be exempted compare to the proposed project. However under Alternative B, some small low temperature equipment may not be able to comply with the NOx emission limits in accordance with the 25 year compliance schedule. If Alternative B is implemented, equivalent the environmental impacts (as NOx emission reductions foregone) and health benefits will be equivalent to as the proposed project beginning in compliance years 2017 but will have less environmental impacts and more health benefits than the proposed project beginning in compliance year 2018 and for any year thereafter.

For these aforementioned reasons, aside from Alternative A, Alternative B is concluded to be the environmentally superior alternative.

If Alternative C is implemented, less NOx emission reductions would be achieved and less health benefits from reducing NOx emissions overall will be reached between compliance years 2018 and any year thereafter. Alternative C extends the delay in NOx emission reductions as compared to the proposed project. For this reason, when compared to the proposed project, Alternative C provides fewer benefits to air quality and public health. Of the significant adverse operational air quality impacts that would be generated under Alternative C, the impacts would be more than the proposed project and more significant beginning in compliance year 2018 and for any year thereafter.

If Alternative D were implemented, less NOx emission reductions would be achieved and less health benefits from reducing NOx emissions overall will be reached beginning in compliance year 2018 and any year thereafter. Under Alternative D, the NOx emission reductions foregone are not expected to be recovered unless the affected equipment units are replaced or retrofitted due to a failure to demonstrate that the affected equipment can achieve NOx emissions at the level less than one pound per day per equipment unit. Thus, under these conditions, the impacts from the Alternative D would be more than the proposed project and more than significant for air quality beginning in compliance year 2018 and for any year thereafter.

Thus, when comparing the environmental effects of the project alternatives with the proposed project and evaluating the effectiveness of achieving the project objectives of the proposed project versus the project alternatives, the proposed project provides the best balance in achieving the project objectives while minimizing the significant adverse environmental impacts to operational air quality.

## APPENDIX A

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### PROPOSED AMENDED RULE 1147

In order to save space and avoid repetition, please refer to the latest version of Proposed Amended Rule 1147 located elsewhere in the Governing Board Package. The version of Proposed Amended Rule 1147 that was circulated with the Draft SEA and released on March 24, 2017 for a 46-day public review and comment period ending on May 9, 2017 was identified as “PAR 1147 March 22, 2017.” Original hard copies of the Draft SEA, which include the draft version of the proposed rule listed above, can be obtained through the SCAQMD Public Information Center at the Diamond Bar headquarters or by contacting the SCAQMD’s Public Information Center by phone at (909) 396-2688 or by email at [PICrequests@aqmd.gov](mailto:PICrequests@aqmd.gov).

## **APPENDIX B**

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### **NOTICE OF PREPARATION/INITIAL STUDY**



# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178  
(909) 396-2000 • [www.aqmd.gov](http://www.aqmd.gov)

**SUBJECT: NOTICE OF PREPARATION OF A DRAFT  
ENVIRONMENTAL ASSESSMENT**

**PROJECT TITLE: PROPOSED AMENDED RULE (PAR) 1147 – NO<sub>x</sub>  
REDUCTIONS FROM MISCELLANEOUS SOURCES**

In accordance with the California Environmental Quality Act (CEQA), the South Coast Air Quality Management District (SCAQMD), as the Lead Agency, must address the potential adverse impacts of the proposed project on the environment and as such, has prepared this Notice of Preparation (NOP) of the Draft Environmental Assessment (EA) and Initial Study (IS). The NOP/IS serves two purposes: 1) to solicit information on the scope of the environmental analysis for the proposed project, and 2) to notify public agencies and the public that the SCAQMD will prepare a Draft EA to further assess potential adverse environmental impacts that may result from implementing the proposed project.

This letter, the attached NOP, and IS are not SCAQMD applications or forms requiring a response from you. Their purpose is simply to provide information to allow public agencies and the public the opportunity to obtain, review and comment on the environmental analysis for the above project. If the proposed project has no bearing on you or your organization, no action on your part is necessary. If you wish to receive the IS for the proposed project, the document is available from the SCAQMD's CEQA website at <http://www.aqmd.gov/home/library/documents-support-material/lead-agency-scaqmd-projects> or by contacting Fabian Wesson, Public Advisor at the SCAQMD's Public Information Center by phone at (909) 396-2688 or by email at [PICrequests@aqmd.gov](mailto:PICrequests@aqmd.gov). Comments focusing on your area of expertise, your agency's area of jurisdiction, if applicable, or issues relative to the environmental analysis should be sent to Mr. Sam Wang (c/o Planning - CEQA) at the above address, by fax to (909) 396-3324, or by email to [swang1@aqmd.gov](mailto:swang1@aqmd.gov). Comments must be received no later than 5:00 p.m. on Friday, March 3, 2017. Please include the name, phone number, and email address of the contact person. Questions regarding the proposed amended rule should be directed to Mr. Wayne Barcikowski at (909) 396-3077 or by email to [wbarcikowski@aqmd.gov](mailto:wbarcikowski@aqmd.gov).

The Public Workshop and CEQA Scoping Meeting for PAR 1147 is scheduled for February 15, 2017. The Public Hearing for PAR 1147 is scheduled for June 2, 2017. (Note: Public Meeting dates are subject to change).

**Date:** January 31, 2017

**Signature:**

A handwritten signature in black ink, appearing to read "Barbara Radlein".

---

Barbara Radlein  
Program Supervisor, CEQA  
Planning, Rules, and Area Sources

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**21865 Copley Drive, Diamond Bar, CA 91765-4178**

**NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL ASSESSMENT**

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**Project Title:**

Proposed Amended Rule (PAR) 1147 – NO<sub>x</sub> Reductions from Miscellaneous Sources

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**Project Location:**

The proposed project may affect facilities located throughout the South Coast Air Quality Management District's (SCAQMD) jurisdiction, which covers all of Orange County, the urban portions of Los Angeles and San Bernardino counties southwest of the San Bernardino and San Gabriel mountains, and nearly all of Riverside County, with the exception of communities near the state border.

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**Description of Nature, Purpose, and Beneficiaries of Project:**

SCAQMD staff is proposing to amend Rule 1147 – NO<sub>x</sub> Reductions from Miscellaneous Sources, in order to resolve Rule 1147 compliance issues that have been raised by stakeholders. If adopted, PAR 1147 would: 1) change the NO<sub>x</sub> emission limit for low temperature (<1,200 degrees Fahrenheit, °F) ovens and other units with a heat input rating of less than 325,000 Btu/hour from 30 parts per million (ppm) to 60 ppm; 2) change the NO<sub>x</sub> emission limit for low temperature afterburners, burn-off ovens, incinerators, and related equipment from 30 ppm to 60 ppm; 3) change the compliance date for small in-use units (with NO<sub>x</sub> emissions of one pound per day or less) from a schedule based on a 20 year lifetime to a 35 year lifetime or until the units are replaced, retrofit or relocated; 4) change the compliance date for heated process tanks from a schedule based on a 15 year to 20 year lifetime to when the units are replaced, retrofit or relocated; 5) add a testing exemption for ultra-low NO<sub>x</sub> infrared burners; 6) clarify an exemption for food ovens; and 7) clarify an exemption for flare type systems. Some facilities that may be affected by PAR 1147 are identified on lists compiled by the California Department of Toxic Substances Control per California Government Code §65962.5. If implemented, PAR 1147 is expected to result in NO<sub>x</sub> emission reductions foregone of up to 0.9 tons per day in 2017. However, the emission reductions foregone will be eventually recaptured because the existing units will be regularly replaced and upgraded over time.

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**Lead Agency:**

South Coast Air Quality Management District

**Division:**

Planning, Rule Development and Area Sources

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**Initial Study and all supporting documentation are available at:**

SCAQMD Headquarters  
21865 Copley Drive  
Diamond Bar, CA 91765

**or by calling:**

(909) 396-2649

**or by accessing the SCAQMD's website at:**

<http://www.aqmd.gov/home/library/documents-support-material/lead-agency-scaqmd-projects>

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**The Public Notice of Preparation is provided to the public through the following:**

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Los Angeles Times (February 1, 2017) | <input checked="" type="checkbox"/> SCAQMD Mailing List & Interested Parties |
| <input checked="" type="checkbox"/> SCAQMD Public Information Center     | <input checked="" type="checkbox"/> SCAQMD Website                           |
- 

**Initial Study 30-day Review Period:**

February 1, 2017 – March 3, 2017

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**Scheduled Public Meeting Date(s) (subject to change):**

Public Workshop & CEQA Scoping Meeting: February 15, 2017, 1:30 p.m.; SCAQMD Headquarters - Auditorium

SCAQMD Governing Board Hearing: June 2, 2017, 9:00 a.m.; SCAQMD Headquarters – Auditorium

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The proposed project may have areawide significance; therefore, a CEQA scoping meeting is required to be held pursuant to Public Resources Code §21083.9 (a)(2). The CEQA Scoping Meeting will be held in conjunction with the Public Workshop (see Scheduled Public Meeting Date(s) above).

---

**Send CEQA Comments to:**

Mr. Sam Wang

**Phone:**

(909) 396-2649

**Email:**

[swang1@aqmd.gov](mailto:swang1@aqmd.gov)

**Fax:**

(909) 396-3324

---

**Direct Questions on PAR 1147:**

Mr. Wayne Barcikowski

**Phone:**

(909) 396-3077

**Email:**

[wbarcikowski@aqmd.gov](mailto:wbarcikowski@aqmd.gov)

**Fax:**

(909) 396-3324

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# **SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

## **Initial Study for Proposed Amended Rule 1147 – NO<sub>x</sub> Reductions from Miscellaneous Sources**

**January 2017**

**SCAQMD No. 01312017SW**

**State Clearinghouse No: To Be Determined**

**Executive Officer**

Wayne Nastri

**Deputy Executive Officer**

**Planning, Rule Development and Area Sources**

Philip Fine, Ph.D.

**Acting Assistant Deputy Executive Officer**

**Planning, Rule Development and Area Sources**

Susan Nakamura

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**Author:** Sam Wang Air Quality Specialist, CEQA

**Reviewed**

<b>By:</b>	Jillian Wong, Ph.D.	Planning and Rules Manager, CEQA
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	Wayne Barcikowski	Air Quality Specialist, Rule Development
	Barbara Baird	Chief Deputy Counsel
	William Wong	Principal Deputy District Counsel



**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
GOVERNING BOARD**

Chairman: DR. WILLIAM A. BURKE  
Speaker of the Assembly Appointee

Vice Chairman: BEN BENOIT  
Mayor Pro Tem, Wildomar  
Cities of Riverside County

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County of Riverside

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Cities of Los Angeles County/Eastern Region

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County of Orange

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Senate Rules Committee Appointee

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Councilmember, Lake Forest  
Cities of Orange County

JANICE RUTHERFORD  
Supervisor, Second District  
County of San Bernardino

**EXECUTIVE OFFICER:**

WAYNE NASTRI

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## **CHAPTER 1**

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### **PROJECT DESCRIPTION**

**Introduction**

**California Environmental Quality Act**

**Project Location**

**Project Background**

**Technology Assessment**

**Project Description**

**Alternatives**

## INTRODUCTION

The California Legislature created the South Coast Air Quality Management District (SCAQMD) in 1977<sup>1</sup> as the agency responsible for developing and enforcing air pollution control rules and regulations in the South Coast Air Basin (Basin) and portions of the Salton Sea Air Basin and Mojave Desert Air Basin. In 1977, amendments to the federal Clean Air Act (CAA) included requirements for submitting State Implementation Plans (SIPs) for nonattainment areas that fail to meet all federal ambient air quality standards (CAA § 172) and similar requirements exist in state law (Health and Safety Code § 40462). The federal CAA was amended in 1990 to specify attainment dates and SIP requirements for ozone, carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>) and particulate matter with an aerodynamic diameter of less than 10 microns (PM<sub>10</sub>). In 1997, the United States Environmental Protection Agency (U.S. EPA) promulgated ambient air quality standards for particulate matter with an aerodynamic diameter less than 2.5 microns (PM<sub>2.5</sub>). The California Clean Air Act (CCAA), adopted in 1988, requires the SCAQMD to achieve and maintain state ambient air quality standards for ozone, CO, sulfur dioxide (SO<sub>2</sub>), and NO<sub>2</sub> by the earliest practicable date (Health & Safety Code § 40910). The CCAA also requires a three-year plan review, and, if necessary, an update to the SIP. The U.S. EPA is required to periodically update the national ambient air quality standards (NAAQS).

By statute, the SCAQMD is required to adopt an air quality management plan (AQMP) demonstrating compliance with all federal and state ambient air quality standards for the areas within SCAQMD jurisdiction<sup>2</sup>. Furthermore, the SCAQMD must adopt rules and regulations that carry out the AQMP<sup>3</sup>. The AQMP is a regional blueprint for how the SCAQMD will achieve air quality standards and healthful air and the Draft Final 2016 AQMP<sup>4</sup> contains multiple goals promoting reductions of criteria air pollutants, greenhouse gases, and toxics.

The Basin, which includes all of Orange County and the non-desert portions of Los Angeles, San Bernardino and Riverside counties, has one of the worst air quality problems in the nation. Though there have been significant improvements in air quality in the Basin over the last two decades, some ambient air quality standards are still exceeded relatively frequently and by a wide margin. The 2012 AQMP, submitted to the California Air Resources Board (CARB) for SIP inclusion in December 2012, concluded that further reductions in PM<sub>2.5</sub> and oxides of nitrogen (NO<sub>x</sub>) emissions would be necessary to attain the air quality standards for 24-hour PM<sub>2.5</sub> and 8-hour ozone by the dates mandated by federal law. Less emphasis was placed on achieving emission reductions of volatile organic compounds (VOCs) because NO<sub>x</sub> emission reductions have a greater co-benefit of also reducing ozone, and PM<sub>2.5</sub> formation. Ozone, a criteria pollutant that has been shown to adversely affect human health, is formed when VOCs react with NO<sub>x</sub> in the atmosphere. NO<sub>x</sub> is a precursor to the formation of ozone and PM<sub>2.5</sub>.

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<sup>1</sup> The Lewis-Presley Air Quality Management Act, 1976 Cal. Stats., ch. 324 (codified at Health and Safety Code §§40400-40540).

<sup>2</sup> Health and Safety Code §40460(a).

<sup>3</sup> Health and Safety Code §40440(a).

<sup>4</sup> SCAQMD, Draft Final 2016 Air Quality Management Plan. [http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/draft-final-aqmp/clean/2016finaldraftaqmpdec2016\(clean\).pdf](http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/draft-final-aqmp/clean/2016finaldraftaqmpdec2016(clean).pdf)

SCAQMD adopted Rule 1147 - NO<sub>x</sub> Reductions From Miscellaneous Sources, in December 2008, to control NO<sub>x</sub> emissions from miscellaneous gas and liquid fuel fired combustion equipment, including, but not limited to: ovens, dryers, dehydrators, heaters, kilns, calciners, furnaces, heated pots, cookers, roasters, fryers, closed and open heated tanks and evaporators, distillation units, degassing units, incinerators, and soil remediation units. Rule 1147 required new, modified, relocated and in-use combustion equipment to comply with equipment-specific NO<sub>x</sub> emission limits. For in-use equipment, compliance dates for emission limits were based on the date of equipment manufacture, and emission limits went into effect for older equipment first. Owners of equipment were provided at least 15 years before existing equipment would need to be modified or replaced in order to meet the emission limits. Rule 1147 also contained test methods and provided alternate compliance options, including a process for certifying NO<sub>x</sub> emissions through an approved testing program. Other requirements included equipment maintenance, meters and recordkeeping.

Businesses have expressed concern regarding the cost effectiveness of complying with the rule requirements for small and low emission sources (less than 1 pound per day of NO<sub>x</sub>). In addition, a technology assessment conducted by staff for these small sources indicates that emission limits should be changed for certain specific applications based on technical feasibility and burner availability. SCAQMD staff estimates that 4,900 to 5,650 out of 6,400 units and up to 3,900 facilities would benefit from delayed compliance requirements proposed in Proposed Amended Rule (PAR) 1147. As many as 3,400 spray booths used in manufacturing, equipment repair and maintenance, and auto body repair will benefit from the proposed amendments.

## CALIFORNIA ENVIRONMENTAL QUALITY ACT

The California Environmental Quality Act (CEQA), Public Resources Code Section 21000 *et seq.*, requires environmental impacts of proposed projects to be evaluated and feasible methods to reduce, avoid or eliminate significant adverse impacts of these projects to be identified and implemented. The lead agency is the “public agency that has the principal responsibility for carrying out or approving a project that may have a significant effect upon the environment” (Public Resources Code § 21067). Since the SCAQMD has the primary responsibility for supervising or approving the entire project as a whole, which is a proposed SCAQMD rule, it is the most appropriate public agency to act as lead agency (CEQA Guidelines<sup>5</sup> § 15051(b)).

PAR 1147 is considered a “project” as defined by CEQA. CEQA requires that all potential adverse environmental impacts of proposed projects be evaluated and that methods to reduce or avoid identified significant adverse environmental impacts of these projects be implemented if feasible. The purpose of the CEQA process is to inform the SCAQMD Governing Board, public agencies, and interested parties of potential adverse environmental impacts that could result from implementing the proposed project and to identify feasible mitigation measures or alternatives, when an impact is significant.

Public Resources Code Section 21080.5 allows public agencies with regulatory programs to prepare a plan or other written documents in lieu of an environmental impact report once the

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<sup>5</sup> The CEQA Guidelines are codified at Title 14 California Code of Regulations § 15000 *et seq.*

secretary of the resources agency has certified the regulatory program. The SCAQMD's regulatory program was certified by the secretary of resources agency on March 1, 1989, and has been adopted as SCAQMD Rule 110 – Rule Adoption Procedures to Assure Protection and Enhancement of the Environment. Pursuant to Rule 110 (the rule which implements the SCAQMD's certified regulatory program), SCAQMD is preparing a Draft Environmental Assessment (EA) to evaluate potential adverse impacts from the proposed project.

The proposed amendments to Rule 1147 are considered a “project” as defined by CEQA. SCAQMD’s review of the proposed project shows that implementation of PAR 1147 may have a significant adverse effect on the environment. Since PAR 1147 may have statewide, regional or areawide significance, a CEQA scoping meeting is required to be held for the proposed project pursuant to Public Resources Code Section 21083.9 (a)(2). Information regarding the CEQA scoping meeting can be found on the NOP.

Because PAR 1147 is expected cause potentially significant adverse impacts, the appropriate type of CEQA document to be prepared for the proposed project will be an Environmental Assessment (EA). The EA is a substitute CEQA document, prepared in lieu of a program environmental impact report (EIR) (CEQA Guidelines §15252), pursuant to the SCAQMD’s Certified Regulatory Program (CEQA Guidelines §15251 (I); codified in SCAQMD Rule 110). The EA is also a public disclosure document intended to: 1) provide the lead agency, responsible agencies, decision makers and the general public with information on the environmental impacts of the proposed project; and, 2) be used as a tool by decision makers to facilitate decision making on the proposed project.

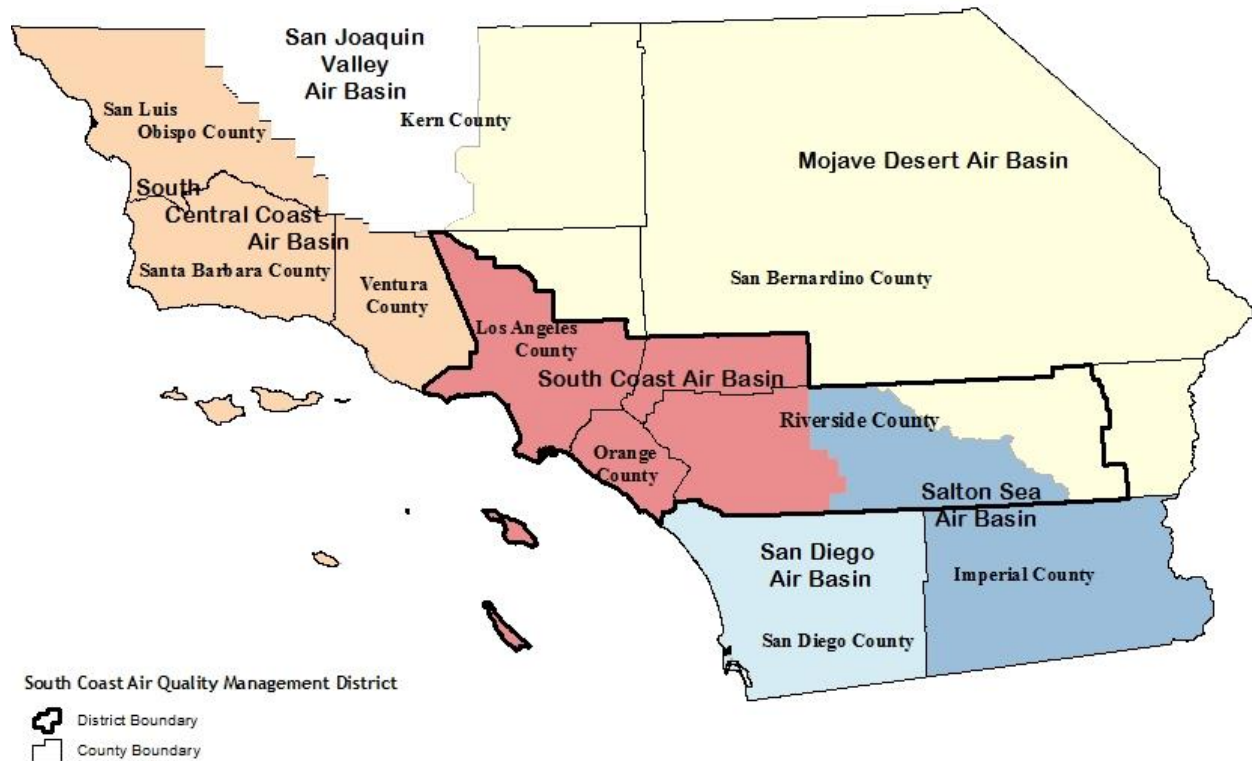
The first step of preparing an EA is to prepare a Notice of Preparation (NOP) with an Initial Study (IS) that includes an Environmental Checklist and project description. The Environmental Checklist provides a standard evaluation tool to identify a project's adverse environmental impacts. The NOP/IS is also intended to provide information about the proposed project to other public agencies and interested parties prior to the release of the Draft EA.

Thus, the SCAQMD as Lead Agency has prepared this NOP/IS for the proposed project. The initial evaluation in the NOP/IS identified the topic of air quality as potentially being adversely affected by the proposed project: Written comments received on the scope of the environmental analysis will be considered when preparing the Draft EA. Responses to comments on the NOP/IS will be included in the Draft EA.

## **PROJECT LOCATION**

PAR 1147 would affect up to 3,900 facilities which are located within SCAQMD’s jurisdiction. The SCAQMD has jurisdiction over an area of approximately 10,743 square miles, consisting of the four-county South Coast Air Basin (Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino counties), and the Riverside County portions of the Salton Sea Air Basin (SSAB) and Mojave Desert Air Basin (MDAB). The Basin, which is a subarea of SCAQMD’s jurisdiction, is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto mountains to the north and east. It includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. The Riverside County portion of the SSAB is bounded by the San Jacinto Mountains in the west and spans

eastward up to the Palo Verde Valley. A federal nonattainment area (known as the Coachella Valley Planning Area) is a subregion of Riverside County and the SSAB that is bounded by the San Jacinto Mountains to the west and the eastern boundary of the Coachella Valley to the east (see Figure 1-1).



**Figure 1-1**  
**Southern California Air Basins**

## PROJECT BACKGROUND

Rule 1147 – NO<sub>x</sub> Reductions from Miscellaneous Sources, was adopted by the SCAQMD Governing Board on December 5, 2008. Rule 1147 established NO<sub>x</sub> emission limits for a variety of combustion equipment and affected new and existing combustion equipment requiring permits that are not regulated by other SCAQMD rules limiting emissions of NO<sub>x</sub>. Rule 1147 incorporated two control measures of the 2007 AQMP: CMB-01 – NO<sub>x</sub> Reductions from Non-RECLAIM Ovens, Dryers and Furnaces, and MCS-01 – Facility Modernization. Control Measure MCS-01 proposed that existing in-use equipment over time meet best available control technology (BACT) emission limits in place at the time the 2007 AQMP was adopted. Control Measure CMB-01 proposed emission NO<sub>x</sub> limits in the range of 20 to 60 parts per million (ppm) for ovens, dryers, kilns, furnaces and other combustion equipment.

Under Rule 1147, regulated gaseous fuel-fired equipment must meet an emission limit of 30 or 60 ppm of NO<sub>x</sub> based on the type of equipment and process temperature. All regulated liquid fuel-fired equipment must meet an emission limit of 40 or 60 ppm for NO<sub>x</sub> based on its process temperature. Compliance dates for emission limits are based on the date of equipment manufacture and emission limits are applicable to older equipment first. Owners of equipment are provided at least 15 years before they must modify or replace existing equipment to meet emission limits.

Rule 1147 also established NO<sub>x</sub> emissions test methods and provided alternate compliance options including a process for certification of equipment through an approved testing program. Other requirements included equipment maintenance, time and fuel meter installation and record keeping.

Rule 1147 was amended on September 9, 2011 to: 1) delay implementation dates by up to two years; 2) remove a requirement for fuel or time meters; and 3) provide compliance flexibility for small and large sources. In addition, the amendments included a requirement for a technology assessment to be conducted on the availability of low NO<sub>x</sub> burner systems for processes with NO<sub>x</sub> emissions of one pound per day or less that are not typically subject to a BACT requirement as new sources. The technology assessment was completed by SCAQMD staff and included an evaluation of cost and cost effectiveness for small and low emission sources. The technology assessment was also reviewed by a third party consultant. Subsequently, PAR 1147 was crafted to be consistent with the recommendations provided by the third party consultant. In addition, PAR 1147 also contains elements to address recommendations proposed by staff (that were separate from the consultant's review) in order to resolve certain stakeholders' compliance issues.

## TECHNOLOGY ASSESSMENT

The first phase of the SCAQMD technology assessment targeted sources in which burner technology was either not available or the retrofit cost was comparable to the cost of replacing the unit. Several categories of equipment were identified and removed from Rule 1147. Further, the requirement for a permit for these equipment categories was removed during the May 2013 amendments to SCAQMD Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II, and Rule 222 – Filing Requirements For Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II. SCAQMD staff continued conducting a technical evaluation and developed Rule 1153.1 – Emissions of Oxides of Nitrogen from Commercial Food Ovens, to move existing in-use food ovens, roasters and smokehouses from Rule 1147 into their own rule. Rule 1153.1 was adopted on November 7, 2014 and provided more appropriate temperature ranges for defining emission limits, food oven specific emission limits, later compliance dates and an exemption for small units. Both Rule 1147 and R 1153.1 have been approved by EPA and are included in the SIP.

The last phase of the technology assessment focused on the remaining categories of small and low emission equipment that were not addressed in SCAQMD Rules 219, 222 and 1153.1. While the technology assessment report focused on equipment with NO<sub>x</sub> emissions of one pound per day or less, the report also included information and analysis applicable to larger units in response to businesses' concerns regarding the availability of technology for larger equipment.



The technology assessment utilizes information on affected equipment from the SCAQMD's permitting system, SCAQMD Regulation XIII - New Source Review, Rule 1147 emissions testing programs, manufacturers of equipment and burners, affected businesses, consulting engineers, and industry representatives. The technology assessment provides information on the types and number of equipment affected by Rule 1147, emissions characteristics of the affected equipment, and estimates of the cost and cost-effectiveness of replacing existing older combustion systems. Overall, the technology assessment provides insight into compliance and affordability challenges faced by businesses affected by Rule 1147.

With the exception of a few categories of equipment, the technology review demonstrates that low NO<sub>x</sub> burner systems are available for every category of equipment subject to Rule 1147 and have been since the late 1990's. However, SCAQMD staff has identified the following three types of equipment for which burners are not readily available or cannot be retrofitted: 1) low temperature ovens and dryers with heat inputs of less than 325,000 Btu per hour (0.325 mmBtu/hour); 2) existing heated process tanks, evaporators and parts washers; and 3) low temperature burn-off ovens and incinerators.

As a result of the technology assessment, the following five recommendations were proposed for consideration in future rule amendments to Rule 1147:

1. Exempt sources with total rated heat input less than 325,000 Btu per hour from the Rule 1147 NO<sub>x</sub> emission limit;
2. Change the NO<sub>x</sub> emission limit from 30 ppm to 60 ppm NO<sub>x</sub> for the primary chamber of all multi-chamber burn-off ovens, burn-out furnaces and incinerators for all process temperature;
3. Delay compliance for existing in-use heated process tanks, evaporators and parts washers from the NO<sub>x</sub> emission limit until such time the combustion system or tank is modified, replaced or relocated;
4. Delay compliance with the NO<sub>x</sub> emission limit for existing in-use spray booths until the heating system is modified or replaced or the unit is relocated; and
5. Delay compliance with the NO<sub>x</sub> emission limit for existing in-use units with actual NO<sub>x</sub> emissions of one pound per day or less until the combustion system is modified or replaced or the unit is relocated.

## PROJECT DESCRIPTION

SCAQMD staff is proposing to amend Rule 1147 to reflect the recommendations made in the technology assessment and to resolve compliance issues that have been raised by stakeholders. If adopted, PAR 1147 would:

- change the NO<sub>x</sub> emission limit for low temperature (<1,200 °F) ovens and other units with a heat input rating of less than 325,000 Btu/hour from 30 parts per million (ppm) to 60 ppm;
- change the NO<sub>x</sub> emission limit for low temperature afterburners, burn-off ovens, incinerators, and related equipment from 30 ppm to 60 ppm;

- change the compliance date for small in-use units (with NO<sub>x</sub> emissions of one pound per day or less) from a schedule based on a 20 year lifetime to a 35 year lifetime or until the units are replaced, retrofit or relocated;
- change the compliance date for heated process tanks from a schedule based on a 15 year to 20 year lifetime to when the units are replaced, retrofit or relocated;
- add a testing exemption for ultra-low NO<sub>x</sub> infrared burners;
- clarify an exemption for food ovens; and
- clarify an exemption for flare type systems.

If implemented, PAR 1147 is expected to result in NO<sub>x</sub> emission reductions foregone of up to 0.9 tons per day in 2017. However, the emission reductions foregone will be eventually recaptured because the existing units will be regularly replaced and upgraded over time. A copy of PAR 1147 can be found in Appendix A of this NOP/IS.

## ALTERNATIVES

The Draft EA will discuss and compare a reasonable range of alternatives to the proposed project as required by CEQA Guidelines Section 15126.6 and by SCAQMD Rule 110 where there are potential significant adverse environmental impacts. Alternatives must include realistic measures for attaining the basic objectives of the proposed project and provide a means for evaluating the comparative merits of each alternative. In addition, the range of alternatives must be sufficient to permit a reasoned choice and it need not include every conceivable project alternative. The key issue is whether the selection and discussion of alternatives fosters informed decision making and public participation. A CEQA document need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative.

SCAQMD Rule 110 does not impose any greater requirements for a discussion of project alternatives in an EA than what would be required for an Environmental Impact Report under CEQA. Alternatives will be developed based in part on the major components of the proposed amended rule. The rationale for selecting alternatives rests on CEQA's requirement to present "realistic" alternatives; that is alternatives that can actually be implemented. CEQA also requires an evaluation of a "No Project Alternative."

SCAQMD's policy document Environmental Justice Program Enhancements for fiscal year (FY) 2002-03, Enhancement II-1 recommends that all SCAQMD CEQA assessments include a feasible project alternative with the lowest air toxics emissions. In other words, for any major equipment or process type under the scope of the proposed project that creates a significant environmental impact, at least one alternative, where feasible, shall be considered from a "least harmful" perspective with regard to hazardous air emissions.

The Governing Board may choose to adopt any portion or all of any alternative presented in the EA with appropriate findings as required by CEQA. The Governing Board is able to adopt any portion or all of any of the alternatives presented because the impacts of each alternative will be fully disclosed to the public and the public will have the opportunity to comment on the alternatives and impacts generated by each alternative. Written suggestions on potential project alternatives received during the comment period for the IS will be considered when preparing the Draft EA.

## **CHAPTER 2**

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## **ENVIRONMENTAL CHECKLIST**

**Introduction**

**General Information**

**Environmental Factors Potentially Affected**

**Determination**

**Environmental Checklist and Discussion**

## INTRODUCTION

The environmental checklist provides a standard evaluation tool to identify a project's potential adverse environmental impacts. This checklist identifies and evaluates potential adverse environmental impacts that may be created by PAR 1147.

## GENERAL INFORMATION

Project Title:	Proposed Amended Rule (PAR) 1147 – NO <sub>x</sub> Reductions from Miscellaneous Sources
Lead Agency Name:	South Coast Air Quality Management District
Lead Agency Address:	21865 Copley Drive Diamond Bar, CA 91765
CEQA Contact Person:	Mr. Sam Wang (909) 396-2649
PAR 1147 Contact Person:	Mr. Wayne Barcikowski (909) 396-3077
Project Sponsor's Name:	South Coast Air Quality Management District
Project Sponsor's Address:	21865 Copley Drive Diamond Bar, CA 91765
General Plan Designation:	Not applicable
Zoning:	Not applicable
Description of Project:	PAR 1147 would: 1) change the NO <sub>x</sub> emission limit for low temperature (<1,200 degrees Fahrenheit, °F) ovens and other units with a heat input rating of less than 325,000 Btu/hour from 30 parts per million (ppm) to 60 ppm; 2) change the NO <sub>x</sub> emission limit for low temperature afterburners, burn-off ovens, incinerators, and related equipment from 30 ppm to 60 ppm; 3) change the compliance date for small in-use units (with NO <sub>x</sub> emissions of one pound per day or less) from a schedule based on a 20 year lifetime to a 35 year lifetime or until the units are replaced, retrofit or relocated; 4) change the compliance date for heated process tanks from a schedule based on a 15 year to 20 year lifetime to when the units are replaced, retrofit or relocated; 5) add a testing exemption for ultra-low NO <sub>x</sub> infrared burners; 6) clarify an exemption for food ovens; and 7) clarify an exemption for flare type systems.
Surrounding Land Uses and Setting:	Not applicable
Other Public Agencies Whose Approval is Required:	Not applicable

## ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The following environmental impact areas have been assessed to determine their potential to be affected by PAR 1147. As indicated by the checklist on the following pages, environmental topics marked with an "✓" involve at least one impact that is a “Potentially Significant Impact”. An explanation relative to the determination of impacts can be found following the checklist for each area.

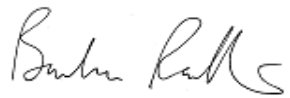
- |  |  |  |
|--|--|--|
| <input type="checkbox"/> Aesthetics  | <input type="checkbox"/> Geology and Soils               | <input type="checkbox"/> Population and Housing                        |
| <input type="checkbox"/> Agriculture and Forestry Resources                  | <input type="checkbox"/> Hazards and Hazardous Materials | <input type="checkbox"/> Public Services                               |
| <input checked="" type="checkbox"/> Air Quality and Greenhouse Gas Emissions | <input type="checkbox"/> Hydrology and Water Quality     | <input type="checkbox"/> Recreation                                    |
| <input type="checkbox"/> Biological Resources                                | <input type="checkbox"/> Land Use and Planning           | <input type="checkbox"/> Solid and Hazardous Waste                     |
| <input type="checkbox"/> Cultural Resources                                  | <input type="checkbox"/> Mineral Resources               | <input type="checkbox"/> Transportation and Traffic                    |
| <input type="checkbox"/> Energy  | <input type="checkbox"/> Noise                           | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

**DETERMINATION**

On the basis of this initial evaluation:

- ☐ I find PAR 1147, in accordance with those findings made pursuant to CEQA Guideline §15252, COULD NOT have a significant effect on the environment, and that an ENVIRONMENTAL ASSESSMENT with no significant impacts has been prepared.
- ☐ I find that although PAR 1147 could have a significant effect on the environment, there will NOT be significant effects in this case because revisions in the project have been made by or agreed to by the project proponent. An ENVIRONMENTAL ASSESSMENT with no significant impacts will be prepared.
- ☒ I find that PAR 1147 MAY have a significant effect(s) on the environment, and an ENVIRONMENTAL ASSESSMENT will be prepared.
- ☐ I find that PAR 1147 MAY have a "potentially significant impact" on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL ASSESSMENT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although PAR 1147 could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL ASSESSMENT pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL ASSESSMENT, including revisions or mitigation measures that are imposed upon PAR 1147, nothing further is required.

Date: January 31, 2017

Signature:   
Barbara Radlein  
Program Supervisor, CEQA  
Planning, Rules, and Area Sources

## ENVIRONMENTAL CHECKLIST AND DISCUSSION

As discussed in Chapter 1, the main focus of PAR 1147 is to resolve Rule 1147 compliance issues that have been raised by businesses. SCAQMD staff estimates 4,900 to 5,650 out of 6,400 units or up to 3,900 facilities would benefit from delayed compliance requirements in PAR 1147. In particular, as many as 3,400 spray booths used in manufacturing, equipment repair and maintenance, and auto body repair will benefit from the proposed amendments.

If adopted, PAR 1147 would: 1) change the NO<sub>x</sub> emission limit for low temperature (<1,200 °F) ovens and other units with a heat input rating of less than 325,000 Btu/hour from 30 ppm to 60 ppm; 2) change the NO<sub>x</sub> emission limit for low temperature afterburners, burn-off ovens, incinerators, and related equipment from 30 ppm to 60 ppm; 3) change the compliance date for small in-use units (with NO<sub>x</sub> emissions of one pound per day or less) from a schedule based on a 20 year lifetime to a 35 year lifetime or until the units are replaced, retrofit or relocated; 4) change the compliance date for heated process tanks from a schedule based on a 15 year to 20 year lifetime to when the units are replaced, retrofit or relocated; 5) add a testing exemption for ultra-low NO<sub>x</sub> infrared burners; 6) clarify an exemption for food ovens; and 7) clarify an exemption for flare type systems. If implemented, PAR 1147 is expected to result in NO<sub>x</sub> emission reductions foregone of up to 0.9 tons per day in 2017 a result of an increase in the allowable NO<sub>x</sub> ppm limit and extending the compliance dates. However, the emission reductions foregone will be eventually recaptured because the existing units will be regularly replaced and upgraded over time.

The effects of implementing the proposed changes outlined above have been evaluated relative to the environmental topics identified in the following environmental checklist (e.g., aesthetics, agricultural and forestry resources, biological resources, etc.). PAR 1147 proposes to extend the compliance dates for small and low use equipment based on a longer equipment lifetime and change the emission limits, which would result in NO<sub>x</sub> emission reductions foregone. Therefore, PAR 1147 would be expected to cause secondary adverse environmental effects only for the topic of air quality and greenhouse gas emissions. While there are other procedural changes proposed to PAR 1147 for clarity and consistency throughout the rule, these procedural changes are administrative in nature and are not expected to have a direct or indirect effect on emissions or cause other physical effects to other environmental topic areas and thus, will not be addressed in further in this Initial Study. Therefore, the effects of implementing the aforementioned changes to the emission standards, compliance dates, and equipment replacement schedule etc. will be the main focus of the analysis in this IS.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>I. AESTHETICS.</b> Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Significance Criteria

PAR 1147 impacts on aesthetics will be considered significant if:

- The project will block views from a scenic highway or corridor.
- The project will adversely affect the visual continuity of the surrounding area.
- The impacts on light and glare will be considered significant if the project adds lighting which would add glare to residential areas or sensitive receptors.

### Discussion

PAR 1147 will resolve current Rule 1147 NO<sub>x</sub> emissions compliance issues that have been raised by businesses. It is estimated that up to 3,900 existing facilities (4,900 to 5,650 out of 6,400 existing units) within SCAB will be affected by PAR 1147. PAR 1147 proposes to extend the compliance dates for small and low use equipment based on a longer equipment lifetime, change the emission limits for certain specific equipment to address technical feasibility of meeting a 30 ppm NO<sub>x</sub> limit, add a testing exemption, and clarify exemptions for certain equipment. Therefore, PAR 1147 is expected to result in NO<sub>x</sub> emission reductions foregone of up to 0.9 tons per day starting in 2017. However, the emission reductions foregone will be eventually recaptured because the existing units will be regularly replaced and upgraded over time. PAR 1147 does not require construction of new buildings, new add-on controls, or relocation of existing facilities. Therefore, construction activities or physical changes to the existing facilities are not expected to occur.

**I. a), b), c) & d) No Impact.** As discussed above, PAR 1147 is expected to affect existing facilities at their current locations. Therefore, adoption of PAR 1147 would not require the construction of new buildings or other structures that would obstruct scenic resources or degrade the existing visual character of a site, including but not limited to, trees, rock outcroppings, or historic buildings. Further, PAR 1147 would not involve the demolition of any existing buildings or facilities, require any subsurface activities, require the acquisition of any new land or the surrendering of existing land, or the modification of any existing land use designations or zoning ordinances. Thus, PAR 1147 is not expected to degrade the visual character of any site where a



facility is located or its surroundings, affect any scenic vista or damage scenic resources. Since PAR 1147 does not require existing facilities to operate at night, it is not expected to create any new source of substantial light or glare.

**Conclusion**

Based upon these considerations, significant adverse aesthetics impacts are not expected from implementing PAR 1147. Since no significant aesthetics impacts were identified, no mitigation measures are necessary or required.

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	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>II. AGRICULTURE AND FORESTRY RESOURCES.</b> Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland mapping and Monitoring Program of the California Resources Agency, to non- agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code §12220(g)), timberland (as defined by Public Resources Code §4526), or timberland zoned Timberland Production (as defined by Government Code §51104 (g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Significance Criteria

Project-related impacts on agriculture and forestry resources will be considered significant if any of the following conditions are met:

Project-related impacts on agriculture and forest resources will be considered significant if any of the following conditions are met:

- The proposed project conflicts with existing zoning or agricultural use or Williamson Act contracts.
- The proposed project will convert prime farmland, unique farmland or farmland of statewide importance as shown on the maps prepared pursuant to the farmland mapping and monitoring program of the California Resources Agency, to non-agricultural use.
- The proposed project conflicts with existing zoning for, or causes rezoning of, forest land (as defined in Public Resources Code §12220 (g)), timberland (as defined in Public Resources Code §4526), or timberland zoned Timberland Production (as defined by Government Code § 51104 (g)).

- The proposed project would involve changes in the existing environment, which due to their location or nature, could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use.

**Discussion**

PAR 1147 will resolve current Rule 1147 NO<sub>x</sub> emissions compliance issues that have been raised by businesses. It is estimated that up to 3,900 existing facilities (4,900 to 5,650 out of 6,400 existing units) within SCAB will be affected by PAR 1147. PAR 1147 proposes to extend the compliance dates for small and low use equipment based on a longer equipment lifetime, change the emission limits for certain specific equipment to address technical feasibility of meeting a 30 ppm NO<sub>x</sub> limit, add a testing exemption, and clarify exemptions for certain equipment. Therefore, PAR 1147 is expected to result in NO<sub>x</sub> emission reductions foregone of up to 0.9 tons per day starting in 2017. However, the emission reductions foregone will be eventually recaptured because the existing units will be regularly replaced and upgraded over time. PAR 1147 does not require construction of new buildings, new add-on controls, or relocation of existing facilities. Therefore, construction activities or physical changes to the existing facilities are not expected to occur.

**II. a), b), c) & d) No Impact.** The existing industrial or commercial businesses that may be affected by the adoption of PAR 1147 are primarily located within urbanized areas that are typically designated as industrial or commercial areas. PAR 1147 would not result in or require the relocation of existing facilities or any new construction of buildings or other structures that would convert farmland to non-agricultural use or conflict with zoning for agricultural use or a Williamson Act contract. PAR 1147 would not require conversion of farmland to non-agricultural uses because the affected equipment is expected to be located completely within the confines of existing affected commercial and industrial facilities. For the same reasons, PAR 1147 would not result in the loss of forest land or conversion of forest land to non-forest use.

**Conclusion**

Based upon these considerations, significant adverse agricultural and forest resources impacts are not expected from implementing PAR 1147. Since no significant agricultural and forest resources impacts were identified, no mitigation measures are necessary or required.

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	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>III. AIR QUALITY AND GREENHOUSE GAS EMISSIONS.</b>				
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute to an existing or projected air quality violation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Air Quality Significance Criteria

To determine whether or not air quality impacts from adopting and implementing PAR 1147 are significant, impacts will be evaluated and compared to the criteria in Table 2-1. PAR 1147 will be considered to have significant adverse air quality impacts if any one of the thresholds in Table 2-1 are equaled or exceeded.

**Table 2-1**  
**SCAQMD Air Quality Significance Thresholds**

Mass Daily Thresholds <sup>a</sup>		
Pollutant	Construction <sup>b</sup>	Operation <sup>c</sup>
NO <sub>x</sub>	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM <sub>10</sub>	150 lbs/day	150 lbs/day
PM <sub>2.5</sub>	55 lbs/day	55 lbs/day
SO <sub>x</sub>	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
Toxic Air Contaminants (TACs), Odor, and GHG Thresholds		
TACs (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic & Acute Hazard Index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
GHG	10,000 MT/yr CO <sub>2</sub> eq for industrial facilities	
Ambient Air Quality Standards for Criteria Pollutants <sup>d</sup>		
NO <sub>2</sub>  1-hour average annual arithmetic mean	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.03 ppm (state) and 0.0534 ppm (federal)	
PM <sub>10</sub> 24-hour average annual average	10.4 µg/m <sup>3</sup> (construction) <sup>e</sup> & 2.5 µg/m <sup>3</sup> (operation) 1.0 µg/m <sup>3</sup>	
PM <sub>2.5</sub> 24-hour average	10.4 µg/m <sup>3</sup> (construction) <sup>e</sup> & 2.5 µg/m <sup>3</sup> (operation)	
SO <sub>2</sub> 1-hour average 24-hour average	0.25 ppm (state) & 0.075 ppm (federal – 99 <sup>th</sup> percentile) 0.04 ppm (state)	
Sulfate 24-hour average	25 µg/m <sup>3</sup> (state)	
CO  1-hour average 8-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) and 35 ppm (federal) 9.0 ppm (state/federal)	
Lead  30-day Average Rolling 3-month average	1.5 µg/m <sup>3</sup> (state) 0.15 µg/m <sup>3</sup> (federal)	

<sup>a</sup> Source: SCAQMD CEQA Handbook (SCAQMD, 1993)

<sup>b</sup> Construction thresholds apply to both the South Coast Air Basin and Coachella Valley (Salton Sea and Mojave Desert Air Basins).

<sup>c</sup> For Coachella Valley, the mass daily thresholds for operation are the same as the construction thresholds.

<sup>d</sup> Ambient air quality thresholds for criteria pollutants based on SCAQMD Rule 1303, Table A-2 unless otherwise stated.

<sup>e</sup> Ambient air quality threshold based on SCAQMD Rule 403.

KEY: lbs/day = pounds per day    ppm = parts per million     $\mu\text{g}/\text{m}^3$  = microgram per cubic meter     $\geq$  = greater than or equal to  
MT/yr CO<sub>2</sub>eq = metric tons per year of CO<sub>2</sub> equivalents     $>$  = greater than

Revision: March 2015

## Discussion

PAR 1147 will resolve current Rule 1147 NO<sub>x</sub> emissions compliance issues that have been raised by businesses. It is estimated that up to 3,900 existing facilities (4,900 to 5,650 out of 6,400 existing units) within SCAB will be affected by PAR 1147. PAR 1147 proposes to extend the compliance dates for small and low use equipment based on a longer equipment lifetime, change the emission limits for certain specific equipment to address technical feasibility of meeting a 30 ppm NO<sub>x</sub> limit, add a testing exemption, and clarify exemptions for certain equipment. Therefore, PAR 1147 is expected to result in NO<sub>x</sub> emission reductions foregone of up to 0.9 tons per day starting in 2017. However, the emission reductions foregone will be eventually recaptured because the existing units will be regularly replaced and upgraded over time. PAR 1147 does not require construction of new buildings, new add-on controls, or relocation of existing facilities. Therefore, construction activities or physical changes to the existing facilities are not expected to occur.

**III. a) Less than Significant Impact.** The equipment affected by PAR 1147 are regulated under current SCAQMD Rule 1147. Development of Rule 1147 was based on two control measures from the SCAQMD 2007 AQMP: Control Measure MCS-01 – Facility Modernization and Control Measure CMB-01 – NO<sub>x</sub> Reductions from Non-RECLAIM Ovens, Dryers, and Furnaces.

Control Measure MCS-01 was a new control measure developed for the 2007 AQMP that proposed companies upgrade their current technology to BACT – the cleanest technology available. The facility modernization control measure proposed that equipment operators meet BACT emission limits at the end of the equipment’s useful life. For equipment currently regulated by Rule 1147, modernization requires burner upgrades, replacement of burner systems or replacement of equipment when the equipment reaches 15 to 20 years of age. However, PAR 1147 would implement higher NO<sub>x</sub> emission limits for applicable units (e.g., low temperature afterburners, burn-off ovens and incinerators) and provide an exemption for several categories of units (e.g., in-use heated process tanks, spray booths and food ovens) in order to resolve Rule 1147 businesses compliance issues. NO<sub>x</sub> emission reductions will be delayed by PAR 1147 and will result in NO<sub>x</sub> emissions foregone of up to 0.9 tons per day starting in 2017 as a result of an increase in the allowable NO<sub>x</sub> ppm limit and changing the compliance date. This is considered a significant air quality impact and will be further evaluated in the Draft EA. However, the emission reductions foregone will be eventually recaptured because the existing units will be regularly replaced and upgraded over time.

Even with emission reductions foregone, implementing PAR 1147 is not expected to significantly conflict with or obstruct implementation of the applicable air quality control plan because the 2012 AQMP demonstrated that the effects of all existing rules, in combination with implementing all AQMP control measures (including “black box” measures not specifically described in the 2012 AQMP) would bring the District into attainment with all applicable national and state ambient air quality standards. In addition, the most recent regional blueprint for how the SCAQMD will achieve air quality standards and healthful air is outlined in the 2016 AQMP<sup>1</sup>, which contains multiple goals promoting reductions of criteria air pollutants (especially NO<sub>x</sub> and PM emissions), greenhouse gases, and toxics. The 2016 AQMP also includes a set aside account of 3 tons per day of SIP reserve to account for any potential backsliding in forecasted rule emission reductions. Any backsliding that may occur will be reflected in future inventories and will be used for future

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<sup>1</sup> SCAQMD, Draft Final 2016 Air Quality Management Plan, [http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/draft-final-aqmp/clean/2016finaldraftaqmpdec2016\(clean\).pdf](http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/draft-final-aqmp/clean/2016finaldraftaqmpdec2016(clean).pdf).

attainment demonstrations, at which time an appropriate control strategy would need to be developed to account for changes in inventory, future emissions, and attainment demonstrations. At the time of this publication, the 2016 AQMP is scheduled for consideration by the SCAQMD Governing Board on February 3, 2017.

Thus, while PAR 1147 will allow a higher NO<sub>x</sub> limit than under current Rule 1147, the foregone emission reductions are expected to be achieved through other control measures in the 2016 AQMP and if needed, to be offset by the 3 tons per day of SIP reserve.

For these reasons, PAR 1147 would not obstruct or conflict with the implementation of the previous 2012 AQMP or the 2016 AQMP. Additionally, PAR 1147 does not include any provisions which would conflict with the attainment of ozone and PM standards in either the 2012 AQMP or the 2016 AQMP. Therefore, PAR 1147 is not expected to conflict or obstruct implementation of the applicable air quality plan.

### **III. b) Potentially Significant Impact.**

#### **Facility Applicability**

The main objective of PAR 1147 is to provide relief for Rule 1147 businesses who are encountering compliance issues and are unable to meet the NO<sub>x</sub> requirements currently established in Rule 1147. SCAQMD staff estimates 4,900 to 5,650 out of 6,400 units and up to 3,900 facilities would benefit from delayed compliance requirements proposed by the amendments considered for Rule 1147. As many as 3,400 spray booths used in manufacturing, equipment repair and maintenance, and auto body repair will benefit from the proposed amendments.

#### **Construction Impacts**

As discussed above, PAR 1147 is expected to affect the existing facilities at current locations. Any potential equipment replacement (e.g. at the end of its useful life) would require minimum construction that was already included in baseline of implementing Rule 1147, as burners are pre-manufactured items that typically drop into place. Therefore, adoption of PAR 1147 would not require the construction of new buildings or other structures that would generate construction emissions. Although there could be a delivery truck if a facility chooses to install a new burner or replace a piece of equipment, the related emissions are already included in the baseline. Because no additional vehicle trips would be generated by PAR 1147, there would be no increase of emissions and no adverse impacts are anticipated.

As a result, according to the above analysis of potential construction impacts, there would be no significant adverse construction air quality impacts resulting from PAR 1147 for criteria pollutants. Therefore, air quality impacts from construction are less than significant and will not be further analyzed in the Draft EA.

**Operational Impacts- Criteria Pollutants**

PAR 1147 will provide relief to businesses by extending the compliance dates for small and low use equipment. Compliance dates will be extended for the expected life of these units (35 years) or when the equipment is replaced, rebuilt or moved to a different facility. This change will reduce compliance cost for affected businesses. The amendment will also change the emission limit for specific categories of equipment (e.g., incinerator section of burn off ovens and small units less than 325,000 Btu/hour) to address technical feasibility of meeting a 30 ppm NO<sub>x</sub> limit. Therefore, it is not expected that the affected facilities will need to change their current operations in order to comply with PAR 1147. However, NO<sub>x</sub> emission reductions for PAR 1147 will be delayed and will result in NO<sub>x</sub> emissions foregone of up to 0.9 tons per day starting in 2017 as a result of an increase in the allowable NO<sub>x</sub> ppm limit and extending the compliance date. However, the emission reductions foregone will be eventually recaptured because the existing units will be regularly replaced and upgraded over time. Detailed analysis of the NO<sub>x</sub> emissions foregone as a result of PAR 1147 will be included in the Draft EA.

Because PAR 1147 focuses on NO<sub>x</sub> emissions, emissions of CO, VOC and PM are not expected to change as a result of PAR 1147 compared with the current requirements for the affected sources under Rule 1147.

**Operational Impacts- Toxic Air Contaminants**

In assessing potential impacts from the adoption of PAR 1147, SCAQMD staff not only evaluates the potential air quality benefits, but also determines potential health risks associated with implementation of PAR 1147.

PAR 1147 will provide relief to businesses by extending the compliance dates for small and low use equipment. Compliance dates will be extended for the expected life of these units (35 years) or when the equipment is replaced, rebuilt or moved to a different facility. This change will reduce compliance cost for affected businesses. The amendment will also change the emission limit for specific categories of equipment (e.g., incinerator section of burn off ovens and small units less than 325,000 Btu/hour) to address technical feasibility of meeting a 30 ppm NO<sub>x</sub> limit. Therefore, it is not expected that the affected facilities will need to change their current operations in order to comply with PAR 1147 and no changes in toxic operational emissions from the existing affected facilities are expected from implementing PAR 1147 when compared to current Rule 1147. As a result, there will be no increase in toxic air contaminant emissions from the affected facilities due to PAR 1147.

**III. c) Potentially Significant Impact.** The cumulative secondary impacts associated with the delayed compliance dates, changes in emission limits, and extended equipment replacement schedules as contained in PAR 1147 will have the potential for creating significant adverse air quality impacts that will be evaluated in the Draft EA.

**III. d) No Impact.** PAR 1147 will provide relief to businesses by extending the compliance dates for small and low use equipment. Compliance dates will be extended for the expected life of these units (35 years) or when the equipment is replaced, rebuilt or moved to a different facility. This change will reduce compliance cost for affected businesses. The amendment will also change the emission limit for specific categories of equipment (e.g., incinerator section of burn off ovens and small units less than 325,000 Btu/hour) to address technical feasibility of meeting a 30 ppm NO<sub>x</sub> limit. Therefore, it is not expected that the affected facilities will need to change their current



operations in order to comply with PAR 1147 and there would be no change in operational emissions from the existing affected facilities and receptors would not be exposed to increased amounts of pollutants.

**III. e) No Impact.** Odor problems depend on individual circumstances, materials involved, and individual odor sensitivities. For example, individuals can differ quite markedly from the population average in their sensitivity to odor due to any variety of innate, chronic or acute physiological conditions. This includes olfactory adaptation or smell fatigue (i.e., continuing exposure to an odor usually results in a gradual diminution or even disappearance of the smell sensation).

PAR 1147 will provide relief to businesses by extending the compliance dates for small and low use equipment. Compliance dates will be extended for the expected life of these units (35 years) or when the equipment is replaced, rebuilt or moved to a different facility. This change will reduce compliance cost for affected businesses. The amendment will also change the emission limit for specific categories of equipment (e.g., incinerator section of burn off ovens and small units less than 325,000 Btu/hour) to address technical feasibility of meeting a 30 ppm NO<sub>x</sub> limit. Therefore, it is not expected that the affected facilities will need to change their current operations in order to comply with PAR 1147 and there would be no change in the existing odor profile of the affected facilities. Further, PAR 1147 would not require construction activities that would require the use of construction equipment. As a result, no odor impacts associated with diesel exhaust from either on-road or off-road mobile sources are expected to occur. Additionally, no change in operation at the affected facilities is expected to occur as a result of the adoption of PAR 1147. Therefore, PAR 1147 is not expected to create new significant adverse objectionable odors.

**III. f) Potentially Significant Impact.** PAR 1147 will provide relief to businesses by extending the compliance dates for small and low use equipment. Compliance dates will be extended for the expected life of these units (35 years) or when the equipment is replaced, rebuilt or moved to a different facility. This change will reduce compliance cost for affected businesses. The amendment will also change the emission limit for specific categories of equipment (e.g., incinerator section of burn off ovens and small units less than 325,000 Btu/hour) to address technical feasibility of meeting a 30 ppm NO<sub>x</sub> limit. Therefore, it is not expected that the affected facilities will need to change their current operations in order to comply with PAR 1147 and no change in operational emissions from the existing affected facilities are expected. However, NO<sub>x</sub> emission reductions for PAR 1147 are delayed compared with Rule 1147 and will result in NO<sub>x</sub> emissions foregone of up to 0.9 tons per day starting in 2017 as a result of an increase in the allowable NO<sub>x</sub> ppm limit and changing the compliance date. However, the emission reductions foregone will be eventually recaptured because the existing units will be regularly replaced and upgraded over time. Detailed analysis of the NO<sub>x</sub> emissions foregone as a result of PAR 1147 will be included in the Draft EA.

**III. g) & h) No Impact.** Changes in global climate patterns have been associated with global warming, an average increase in the temperature of the atmosphere near the Earth's surface, recently attributed to accumulation of GHG emissions in the atmosphere. GHGs trap heat in the atmosphere, which in turn heats the surface of the Earth. Some GHGs occur naturally and are emitted to the atmosphere through natural processes, while others are created and emitted solely through human activities. The emission of GHGs through the combustion of fossil fuels (i.e., fuels containing carbon) in conjunction with other human activities, appears to be closely associated

with global warming.<sup>2</sup> State law defines GHG to include the following: carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>) (HSC §38505(g)). The most common GHG that results from human activity is CO<sub>2</sub>, followed by CH<sub>4</sub> and N<sub>2</sub>O.

GHGs and other global warming pollutants are often perceived as solely global in their impacts and that increasing emissions anywhere in the world contributes to climate change anywhere in the world. However, a study conducted on the health impacts of CO<sub>2</sub> “domes” that form over urban areas cause increases in local temperatures and local criteria pollutants, which have adverse health effects<sup>3</sup>.

The analysis of GHGs is a much different analysis than the analysis of criteria pollutants for the following reasons. For criteria pollutants, the significance thresholds are based on daily emissions because attainment or non-attainment is primarily based on daily exceedances of applicable ambient air quality standards. Further, several ambient air quality standards are based on relatively short-term exposure effects on human health (e.g., one-hour and eight-hour standards). Since the half-life of CO<sub>2</sub> is approximately 100 years, for example, the effects of GHGs occur over a longer term which means they affect the global climate over a relatively long time frame. As a result, the SCAQMD’s current position is to evaluate the effects of GHGs over a longer timeframe than a single day (e.g., annual emissions). GHG emissions are typically considered to be cumulative impacts because they contribute to global climate effects.

On December 5, 2008, the SCAQMD adopted an interim CEQA GHG Significance Threshold for projects where SCAQMD is the lead agency (SCAQMD, 2008). This interim threshold is set at 10,000 metric tons of CO<sub>2</sub> equivalent emissions (MTCO<sub>2</sub>eq) per year. Projects with incremental increases below this threshold will not be cumulatively considerable.

PAR 1147 will provide relief to businesses by extending the compliance dates for small and low use equipment. Compliance dates will be extended for the expected life of these units (35 years) or when the equipment is replaced, rebuilt or moved to a different facility. This change will reduce compliance cost for affected businesses. The amendment will also change the emission limit for specific categories of equipment (e.g., incinerator section of burn off ovens and small units less than 325,000 Btu/hour) to address technical feasibility of meeting a 30 ppm NO<sub>x</sub> limit. Therefore, it is not expected that the affected facilities will need to change their current operations in order to comply with PAR 1147 and there would be no change in operational emissions of other criteria pollutants and GHG emissions, from the existing affected facilities and PAR 1147 is not expected to create significant cumulative adverse GHG emission impacts or conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.

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<sup>2</sup> Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.). 2007. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, 2007. Cambridge University Press.

[http://www.ipcc.ch/publications\\_and\\_data/ar4/wg1/en/contents.html](http://www.ipcc.ch/publications_and_data/ar4/wg1/en/contents.html)

<sup>3</sup> Jacobsen, Mark Z. “Enhancement of Local Air Pollution by Urban CO<sub>2</sub> Domes,” Environmental Science and Technology, as describe in Stanford University press release on March 16, 2010 available at: <http://news.stanford.edu/news/2010/march/urban-carbon-domes-031610.html>.

**Conclusion**

As previously discussed, PAR 1147 is expected to result in potentially significant impacts on air quality. Potentially significant adverse air quality impacts from the adoption and implementation of PAR 1147 will be further evaluated in the Draft EA.

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	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>IV. BIOLOGICAL RESOURCES.</b>				
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by §404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Significance Criteria**

Impacts on biological resources will be considered significant if any of the following criteria apply:

- The project results in a loss of plant communities or animal habitat considered to be rare, threatened or endangered by federal, state or local agencies.
- The project interferes substantially with the movement of any resident or migratory wildlife species.
- The project adversely affects aquatic communities through construction or operation of the project.

**Discussion**

PAR 1147 will resolve current Rule 1147 NO<sub>x</sub> emissions compliance issues that have been raised by businesses. It is estimated that up to 3,900 existing facilities (4,900 to 5,650 out of 6,400 existing units) within SCAB will be affected by PAR 1147. PAR 1147 proposes to extend the compliance dates for small and low use equipment based on a longer equipment lifetime, change the emission limits for certain specific equipment to address technical feasibility of meeting a 30 ppm NO<sub>x</sub> limit, add a testing exemption, and clarify exemptions for certain equipment. Therefore, PAR 1147 is expected to result in NO<sub>x</sub> emission reductions foregone of up to 0.9 tons per day starting in 2017. However, the emission reductions foregone will be eventually recaptured because the existing units will be regularly replaced and upgraded over time. PAR 1147 does not require construction of new buildings, new add-on controls, or relocation of existing facilities. Therefore, construction activities or physical changes to the existing facilities are not expected to occur.

**IV. a), b), c), & d) No Impact.** PAR 1147 would not require any relocation of existing facilities, new development, or require major modifications to buildings or other structures to comply with the new requirements for the affected equipment beyond what is currently required in Rule 1147. The equipment affected is expected to be located at existing facilities that are already paved. As a result, PAR 1147 would not directly or indirectly affect any species identified as a candidate, sensitive or special status species, riparian habitat, federally protected wetlands, or migratory corridors. For this same reason, PAR 1147 is not expected to adversely affect special status plants, animals, or natural communities.

**IV. e) & f) No Impact.** PAR 1147 would not require any relocation of existing facilities, new development, or require major modifications to buildings or other structures to comply with the new requirements for the affected equipment beyond what is currently required in Rule 1147. The equipment affected is expected to be located at existing facilities. Therefore, PAR 1147 would not conflict with local policies or ordinances protecting biological resources or local, regional, or state conservation plans because it would not cause new development. Additionally, PAR 1147 would not conflict with any Habitat Conservation Plan, Natural Community Conservation Plan, or any other relevant habitat conservation plan for the same reason identified in Section IV. a), b), c), and d) above. Likewise, PAR 1147 would not in any way impact wildlife or wildlife habitat.

**Conclusion**

Based upon these considerations, significant adverse biological resources impacts are not expected from implementing PAR 1147. Since no significant biological resources impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>V. CULTURAL RESOURCES.</b> Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource, site, or feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code §21074?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Significance Criteria

Impacts to cultural resources will be considered significant if:

- The project results in the disturbance of a significant prehistoric or historic archaeological site or a property of historic or cultural significance, or tribal cultural significance to a community or ethnic or social group or a California Native American tribe.
- Unique paleontological resources or objects with cultural value to a California Native American tribe are present that could be disturbed by construction of the proposed project.
- The project would disturb human remains.

### Discussion

PAR 1147 will resolve current Rule 1147 NO<sub>x</sub> emissions compliance issues that have been raised by businesses. It is estimated that up to 3,900 existing facilities (4,900 to 5,650 out of 6,400 existing units) within SCAB will be affected by PAR 1147. PAR 1147 proposes to extend the compliance dates for small and low use equipment based on a longer equipment lifetime, change the emission limits for certain specific equipment to address technical feasibility of meeting a 30 ppm NO<sub>x</sub> limit, add a testing exemption, and clarify exemptions for certain equipment. Therefore, PAR 1147 is expected to result in NO<sub>x</sub> emission reductions foregone of up to 0.9 tons per day starting in 2017. However, the emission reductions foregone will be eventually recaptured because the existing units will be regularly replaced and upgraded over time. PAR 1147 does not require construction of new buildings, new add-on controls, or relocation of existing facilities. Therefore, construction activities or physical changes to the existing facilities are not expected to occur.

**V. a), b), c), & d) No Impact.** PAR 1147 does not require construction of new facilities, increasing the floor space of existing facilities, or any other construction activities that would require disturbing soil that may contain cultural resources beyond what is currently required in Rule 1147. The equipment affected is expected to be located at existing facilities that are already paved. Since no construction-related activities requiring soil disturbance would be associated with the implementation of PAR 1147, no adverse impacts to historical or cultural resources are anticipated to occur. Further, PAR 1147 is not expected to require any physical changes to the environment, which may disturb paleontological or archaeological resources or disturb human remains interred outside of formal cemeteries.

**V. e) No Impact.** PAR 1147 is not expected to require physical changes, feature, place, cultural landscape, sacred place or object with cultural value to a California Native American Tribe. Furthermore, PAR 1147 is not expected to result in a physical change to a resource determined to be eligible for inclusion or listed in the California Register of Historical Resources or included in a local register of historical resources. For these reasons, PAR 1147 is not expected to cause any substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code §21074.

As part of releasing this CEQA document for public review and comment, the SCAQMD also provided a formal notice of the proposed project to all California Native American Tribes (Tribes) that requested to be on the Native American Heritage Commission's (NAHC) notification list per Public Resources Code §21080.3.1(b)(1). The NAHC notification list provides a 30-day period during which a Tribe may respond to the formal notice, in writing, requesting consultation on the proposed project.

In the event that a Tribe submits a written request for consultation during this 30-day period, the SCAQMD will initiate a consultation with the Tribe within 30 days of receiving the request in accordance with Public Resources Code §21080.3.1(b). Consultation ends when either: 1) both parties agree to measures to avoid or mitigate a significant effect on a Tribal Cultural Resource and agreed upon mitigation measures shall be recommended for inclusion in the environmental document [see Public Resources Code §21082.3(a)]; or, 2) either party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached [see Public Resources Code §21080.3.2(b)(1)-(2) and §21080.3.1(b)(1)].

### **Conclusion**

Based upon these considerations, significant adverse cultural resources impacts are not expected from implementing PAR 1147. Since no significant cultural resources impacts were identified, no mitigation measures are necessary or required.

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	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>VI. ENERGY.</b> Would the project:				
a) Conflict with adopted energy conservation plans?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the need for new or substantially altered power or natural gas utility systems?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Create any significant effects on local or regional energy supplies and on requirements for additional energy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create any significant effects on peak and base period demands for electricity and other forms of energy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Comply with existing energy standards?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Significance Criteria

Impacts to energy resources will be considered significant if any of the following criteria are met:

- The project conflicts with adopted energy conservation plans or standards.
- The project results in substantial depletion of existing energy resource supplies.
- An increase in demand for utilities impacts the current capacities of the electric and natural gas utilities.
- The project uses non-renewable resources in a wasteful and/or inefficient manner.

### Discussion

PAR 1147 will resolve current Rule 1147 NO<sub>x</sub> emissions compliance issues that have been raised by businesses. It is estimated that up to 3,900 existing facilities (4,900 to 5,650 out of 6,400 existing units) within SCAB will be affected by PAR 1147. PAR 1147 proposes to extend the compliance dates for small and low use equipment based on a longer equipment lifetime, change the emission limits for certain specific equipment to address technical feasibility of meeting a 30 ppm NO<sub>x</sub> limit, add a testing exemption, and clarify exemptions for certain equipment. Therefore, PAR 1147 is expected to result in NO<sub>x</sub> emission reductions foregone of up to 0.9 tons per day starting in 2017. However, the emission reductions foregone will be eventually recaptured because the existing units will be regularly replaced and upgraded over time. PAR 1147 does not require construction of new buildings, new add-on controls, or relocation of existing facilities. Therefore, construction activities or physical changes to the existing facilities are not expected to occur.

**VI. a) & e) No Impact.** As discussed above, PAR 1147 is not expected to create any additional demand for energy at any of the affected facilities beyond what is currently required in Rule 1147. In fact, PAR 1147 relaxes the need for add-on controls which consume energy. Since it is unlikely that the affected facilities would require new equipment or modifications, it is unlikely that energy demand requirements would change. As a result, PAR 1147 would not conflict with energy conservation plans, use non-renewable resources in a wasteful manner, or result in the need for



new or substantially altered power or natural gas systems. Since PAR 1147 would affect existing facilities, it will not conflict with adopted energy conservation plans because existing facilities would be expected to continue implementing any existing energy conservation plans. Additionally, operators of affected facilities are expected to implement existing energy conservation plans or comply with energy standards to minimize operating costs.

**VI. b), c) & d) No Impact.** PAR 1147 will provide relief to businesses by extending the compliance dates for small and low use equipment. Compliance dates will be extended for the expected life of these units (35 years) or when the equipment is replaced, rebuilt or moved to a different facility. This change will reduce compliance cost for affected businesses. The amendment will also change the emission limit for specific categories of equipment (e.g., incinerator section of burn off ovens and small units less than 325,000 Btu/hour) to address technical feasibility of meeting a 30 ppm NO<sub>x</sub> limit. Therefore, it is not expected that the affected facilities will need to change their current operations in order to comply with PAR 1147. PAR 1147 is not expected to increase any electricity or natural gas demand in any way and would not create any significant effects on peak and base period demands for electricity and other forms of energy.

### **Conclusion**

Based upon these considerations, significant adverse energy impacts are not expected from implementing PAR 1147. Since no significant energy impacts were identified, no mitigation measures are necessary or required.

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	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>VII. GEOLOGY AND SOILS.</b> Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Significance Criteria

Impacts on the geological environment will be considered significant if any of the following criteria apply:

- Topographic alterations would result in significant changes, disruptions, displacement, excavation, compaction or over covering of large amounts of soil.
- Unique geological resources (paleontological resources or unique outcrops) are present that could be disturbed by the construction of the proposed project.

- Exposure of people or structures to major geologic hazards such as earthquake surface rupture, ground shaking, liquefaction or landslides.
- Secondary seismic effects could occur which could damage facility structures, e.g., liquefaction.
- Other geological hazards exist which could adversely affect the facility, e.g., landslides, mudslides.

### Discussion

PAR 1147 will resolve current Rule 1147 NO<sub>x</sub> emissions compliance issues that have been raised by businesses. It is estimated that up to 3,900 existing facilities (4,900 to 5,650 out of 6,400 existing units) within SCAB will be affected by PAR 1147. PAR 1147 proposes to extend the compliance dates for small and low use equipment based on a longer equipment lifetime, change the emission limits for certain specific equipment to address technical feasibility of meeting a 30 ppm NO<sub>x</sub> limit, add a testing exemption, and clarify exemptions for certain equipment. Therefore, PAR 1147 is expected to result in NO<sub>x</sub> emission reductions foregone of up to 0.9 tons per day starting in 2017. However, the emission reductions foregone will be eventually recaptured because the existing units will be regularly replaced and upgraded over time. PAR 1147 does not require construction of new buildings, new add-on controls, or relocation of existing facilities. Therefore, construction activities or physical changes to the existing facilities are not expected to occur.

**VII. a) No Impact.** Southern California is an area of known seismic activity. Structures must be designed to comply with the Uniform Building Code Zone 4 requirements if they are located in a seismically active area. The local city or county is responsible for assuring that a proposed project complies with the Uniform Building Code as part of the issuance of the building permits and can conduct inspections to ensure compliance. The Uniform Building Code is considered to be a standard safeguard against major structural failures and loss of life. The goal of the code is to provide structures that will: 1) resist minor earthquakes without damage; 2) resist moderate earthquakes without structural damage but with some non-structural damage; and 3) resist major earthquakes without collapse but with some structural and non-structural damage.

The Uniform Building Code bases seismic design on minimum lateral seismic forces (“ground shaking”). The Uniform Building Code requirements operate on the principle that providing appropriate foundations, among other aspects, helps to protect buildings from failure during earthquakes. The basic formulas used for the Uniform Building Code seismic design require determination of the seismic zone and site coefficient, which represent the foundation conditions at the site. Accordingly, buildings and equipment at existing affected facilities are likely to conform with the Uniform Building Code and all other applicable state codes in effect at the time they were constructed.

As discussed above, no new buildings or structures are expected to be constructed; therefore, PAR 1147 is not expected to affect a facility’s ability to continue to comply with any applicable Uniform Building Code requirements. Consequently, PAR 1147 is not expected to expose persons or property to geological hazards such as earthquakes, landslides, mudslides, ground failure, or other natural hazards. As a result, substantial exposure of people or structure to the risk of loss, injury, or death involving seismic-related activities is not anticipated.

**VII. b), c), d) & e) No Impact.** Since PAR 1147 would affect existing facilities, it is expected that the soil types present at the affected facilities that are susceptible to expansion or liquefaction would be considered part of the existing setting. New subsidence impacts are not anticipated since no excavation, grading, or fill activities will occur at affected facilities. Further, PAR 1147 does not involve drilling or removal of underground products (e.g., water, crude oil, et cetera) that could produce new, or make worse existing subsidence effects. Additionally, the affected areas are not envisioned to be prone to new risks from landslides or have unique geologic features, since the affected facilities are located in industrial or commercial areas where such features have already been altered or removed. Finally, since adoption of PAR 1147 would be expected to affect operations at existing facilities, PAR 1147 is not expected to alter or make worse any existing potential for subsidence, liquefaction, etc.

### **Conclusion**

Based upon these considerations, significant adverse geology and soil impacts are not expected from implementing PAR 1147. Since no significant geology and soil impacts were identified, no mitigation measures are necessary or required.

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	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>VIII. HAZARDS AND HAZARDOUS MATERIALS.</b> Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, and disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions, or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public use airport or a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Significantly increased fire hazard in areas with flammable materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Significance Criteria**

Impacts associated with hazards will be considered significant if any of the following occur:

- Non-compliance with any applicable design code or regulation.
- Non-conformance to National Fire Protection Association standards.
- Non-conformance to regulations or generally accepted industry practices related to operating policy and procedures concerning the design, construction, security, leak detection, spill containment or fire protection.
- Exposure to hazardous chemicals in concentrations equal to or greater than the Emergency Response Planning Guideline (ERPG) 2 levels.

**Discussion**

PAR 1147 will resolve current Rule 1147 NO<sub>x</sub> emissions compliance issues that have been raised by businesses. It is estimated that up to 3,900 existing facilities (4,900 to 5,650 out of 6,400 existing units) within SCAB will be affected by PAR 1147. PAR 1147 proposes to extend the compliance dates for small and low use equipment based on a longer equipment lifetime, change the emission limits for certain specific equipment to address technical feasibility of meeting a 30 ppm NO<sub>x</sub> limit, add a testing exemption, and clarify exemptions for certain equipment. Therefore, PAR 1147 is expected to result in NO<sub>x</sub> emission reductions foregone of up to 0.9 tons per day starting in 2017. However, the emission reductions foregone will be eventually recaptured because the existing units will be regularly replaced and upgraded over time. PAR 1147 does not require construction of new buildings, new add-on controls, or relocation of existing facilities. Therefore, construction activities or physical changes to the existing facilities are not expected to occur.

**VIII. a, b) & c) No Impact.** PAR 1147 will provide relief to businesses by extending the compliance dates for small and low use equipment. Compliance dates will be extended for the expected life of these units (35 years) or when the equipment is replaced, rebuilt or moved to a different facility. This change will reduce compliance cost for affected businesses. The amendment will also change the emission limit for specific categories of equipment (e.g., incinerator section of burn off ovens and small units less than 325,000 Btu/hour) to address technical feasibility of meeting a 30 ppm NO<sub>x</sub> limit. Therefore, it is not expected that the affected facilities will need to change their current operations in order to comply with PAR 1147. Since PAR 1147 does not require the transport, use, or disposal of hazardous materials, PAR 1147 will not create a significant hazard to the public or environment through a reasonably foreseeable release of these materials into the environment or cause hazardous emissions within one-quarter mile of an existing or proposed school.

**VIII. d) No Impact.** PAR 1147 will provide relief to businesses by extending the compliance dates for small and low use equipment. Compliance dates will be extended for the expected life of these units (35 years) or when the equipment is replaced, rebuilt or moved to a different facility. This change will reduce compliance cost for affected businesses. The amendment will also change the emission limit for specific categories of equipment (e.g., incinerator section of burn off ovens and small units less than 325,000 Btu/hour) to address technical feasibility of meeting a 30 ppm NO<sub>x</sub> limit. Therefore, it is not expected that the affected facilities will need to change their current operations in order to comply with PAR 1147. Government Code §65962.5 typically refers to a list of facilities that may be subject to Resource Conservation and Recovery Act (RCRA) permits. For any facilities affected by PAR 1147 that are on the Government Code §65962.5 list, it is anticipated that they would continue to manage any and all hazardous materials and hazardous

waste, in accordance with federal, state and local regulations, and PAR 1147 would not affect how the affected facilities currently handle their hazardous materials and would not impose changes to their existing practices.

**VIII. e) No Impact.** PAR 1147 will provide relief to businesses by extending the compliance dates for small and low use equipment. Compliance dates will be extended for the expected life of these units (35 years) or when the equipment is replaced, rebuilt or moved to a different facility. This change will reduce compliance cost for affected businesses. The amendment will also change the emission limit for specific categories of equipment (e.g., incinerator section of burn off ovens and small units less than 325,000 Btu/hour) to address technical feasibility of meeting a 30 ppm NO<sub>x</sub> limit. Therefore, it is not expected that the affected facilities will need to change their current operations in order to comply with PAR 1147. Based on the type of equipment affected, PAR 1147 is not expected to increase or create any new hazardous emissions in general, which could adversely affect public/private airports located in close proximity to the affected sites. Implementation of PAR 1147 is not expected to create any additional safety hazards for people residing or working in the project area.

**VIII. f) No Impact.** PAR 1147 will provide relief to businesses by extending the compliance dates for small and low use equipment. Compliance dates will be extended for the expected life of these units (35 years) or when the equipment is replaced, rebuilt or moved to a different facility. This change will reduce compliance cost for affected businesses. The amendment will also change the emission limit for specific categories of equipment (e.g., incinerator section of burn off ovens and small units less than 325,000 Btu/hour) to address technical feasibility of meeting a 30 ppm NO<sub>x</sub> limit. Therefore, it is not expected that the affected facilities will need to change their current operations in order to comply with PAR 1147. PAR 1147 will not impair implementation of, or physically interfere with any adopted emergency response plan or emergency evacuation plan. Any existing commercial or light industrial facilities affected by PAR 1147 will typically have their own emergency response plans. Any new facilities will be required to prepare emergency response and evacuation plans as part of the land use permit review and approval process conducted by local jurisdictions for new development. Emergency response plans are typically prepared in coordination with the local city or county emergency plans to ensure the safety of not only the public (surrounding local communities), but the facility employees as well. Since PAR 1147 does not involve any change in current uses of any hazardous materials, or generate any new hazardous waste, no changes to emergency response plans are anticipated.

Health and Safety Code §25506 specifically requires all businesses handling hazardous materials to submit a business emergency response plan to assist local administering agencies in the emergency release or threatened release of a hazardous material. Business emergency response plans generally require the following:

1. Identification of individuals who are responsible for various actions, including reporting, assisting emergency response personnel and establishing an emergency response team;
2. Procedures to notify the administering agency, the appropriate local emergency rescue personnel, and the California Office of Emergency Services;
3. Procedures to mitigate a release or threatened release to minimize any potential harm or damage to persons, property or the environment;
4. Procedures to notify the necessary persons who can respond to an emergency within the facility;

5. Details of evacuation plans and procedures;
6. Descriptions of the emergency equipment available in the facility;
7. Identification of local emergency medical assistance; and
8. Training (initial and refresher) programs for employees in:
  - a. The safe handling of hazardous materials used by the business;
  - b. Methods of working with the local public emergency response agencies;
  - c. The use of emergency response resources under control of the handler; and
  - d. Other procedures and resources that will increase public safety and prevent or mitigate a release of hazardous materials.

In general, every county or city and all facilities using a minimum amount of hazardous materials are required to formulate detailed contingency plans to eliminate, or at least minimize, the possibility and effect of fires, explosion, or spills. In conjunction with the California Office of Emergency Services, local jurisdictions have enacted ordinances that set standards for area and business emergency response plans. These requirements include immediate notification, mitigation of an actual or threatened release of a hazardous material, and evacuation of the emergency area. Adopting PAR 1147 is not expected to hinder in any way with the above business emergency response plan requirements.

**VIII. g) No Impact.** Since the affected facilities are primarily located in industrial or commercial areas where wildlands are typically not prevalent, risk of loss or injury associated with wildland fires is not expected as a result of implementing PAR 1147.

**VIII. h) No Impact.** Facilities affected by PAR 1147 must already comply with all local and county requirements for fire prevention and safety. PAR 1147 does not require any activities which would be in conflict with any fire prevention and safety requirements, and thus would not create or increase fire hazards at these existing facilities. Pursuant to local and county fire prevention and safety requirements, facilities are required to maintain appropriate site management practices to prevent fire hazards. PAR 1147 will not interfere with fire prevention practices.

### **Conclusion**

Based upon these considerations, significant adverse hazards and hazardous material impacts are not expected from implementing PAR 1147. Since no significant hazards and hazardous material impacts were identified, no mitigation measures are necessary or required.

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	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>IX. HYDROLOGY AND WATER QUALITY.</b> Would the project:				
a) Violate any water quality standards, waste discharge requirements, exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board, or otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in substantial erosion or siltation on- or off-site or flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Place housing or other structures within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map, which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
f) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam, or inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Require or result in the construction of new water or wastewater treatment facilities or new storm water drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Significance Criteria

Potential impacts on water resources will be considered significant if any of the following criteria apply:

#### Water Demand:

- The existing water supply does not have the capacity to meet the increased demands of the project, or the project would use more than 262,820 gallons per day of potable water.
- The project increases demand for total water by more than five million gallons per day.

#### Water Quality:

- The project will cause degradation or depletion of ground water resources substantially affecting current or future uses.
- The project will cause the degradation of surface water substantially affecting current or future uses.
- The project will result in a violation of National Pollutant Discharge Elimination System (NPDES) permit requirements.

- The capacities of existing or proposed wastewater treatment facilities and the sanitary sewer system are not sufficient to meet the needs of the project.
- The project results in substantial increases in the area of impervious surfaces, such that interference with groundwater recharge efforts occurs.
- The project results in alterations to the course or flow of floodwaters.

### Discussion

PAR 1147 will resolve current Rule 1147 NO<sub>x</sub> emissions compliance issues that have been raised by businesses. It is estimated that up to 3,900 existing facilities (4,900 to 5,650 out of 6,400 existing units) within SCAB will be affected by PAR 1147. PAR 1147 proposes to extend the compliance dates for small and low use equipment based on a longer equipment lifetime, change the emission limits for certain specific equipment to address technical feasibility of meeting a 30 ppm NO<sub>x</sub> limit, add a testing exemption, and clarify exemptions for certain equipment. Therefore, PAR 1147 is expected to result in NO<sub>x</sub> emission reductions foregone of up to 0.9 tons per day starting in 2017. However, the emission reductions foregone will be eventually recaptured because the existing units will be regularly replaced and upgraded over time. PAR 1147 does not require construction of new buildings, new add-on controls, or relocation of existing facilities. Therefore, construction activities or physical changes to the existing facilities are not expected to occur.

**IX. a), b), c), d) & g) No Impact.** PAR 1147 will provide relief to businesses by extending the compliance dates for small and low use equipment. Compliance dates will be extended for the expected life of these units (35 years) or when the equipment is replaced, rebuilt or moved to a different facility. This change will reduce compliance cost for affected businesses. The amendment will also change the emission limit for specific categories of equipment (e.g., incinerator section of burn off ovens and small units less than 325,000 Btu/hour) to address technical feasibility of meeting a 30 ppm NO<sub>x</sub> limit. Therefore, it is not expected that the affected facilities will need to change their current operations in order to comply with PAR 1147. . As discussed above, additional water usage will not result from operating the affected sources at higher NO<sub>x</sub> emission levels, compared to existing Rule 1147.

No additional wastewater generation is expected to result from PAR 1147. Further, PAR 1147 has no provision that would require the construction of additional water resource facilities, increase the need for new or expanded water entitlements, or alter existing drainage patterns. PAR 1147 would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge. PAR 1147 would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Further, the adoption of PAR 1147 would not create a change in the current volume of existing wastewater streams from the affected facilities. In addition, PAR 1147 is not expected to require additional wastewater disposal capacity, violate any water quality standard or wastewater discharge requirements, or otherwise substantially degrade water quality.

Therefore, PAR 1147 is not expected to involve major construction activities including site preparation, grading, etc., so no changes to storm water runoff, drainage patterns, groundwater characteristics, or flow are expected. Additionally, PAR 1147 is not expected to have significant adverse water demand or water quality impacts.

**IX. i) No Impact.** PAR 1147 is not expected to change existing operations at affected facilities, nor would it result in the generation of increased volumes of wastewater, because the requirements

in PAR 1147 have no effects on water usage or water quality. As a result, there are no potential changes in wastewater volume expected from facilities as a result of the adoption of PAR 1147. It is expected that facilities and operations will continue to handle wastewater generated in a similar manner and with the same equipment as the wastewater that is currently generated. Further, PAR 1147 is not expected to cause affected facilities to violate any water quality standard or wastewater discharge requirements since there would be no additional wastewater volumes generated as a result of adopting PAR 1147.

**IX. e), f) & h) No Impact.** As discussed above, PAR 1147 would not require construction of new housing, contribute to the construction of new building structures, or require major modifications or changes to existing structures. Further, PAR 1147 is not expected to require additional workers at affected facilities because PAR 1147 does not affect how equipment is operated. Therefore, PAR 1147 is not expected to generate construction of any new structures in 100-year flood areas as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood delineation map and PAR 1147 is not expected to expose people or structures to significant new flooding risks, or make worse any existing flooding risks. Because PAR 1147 would not require construction of new structures or the addition of new employees, PAR 1147 will not affect in any way any potential flood hazards inundation by seiche, tsunami, or mud flow that may already exist relative to existing facilities or create new hazards at existing facilities. Additionally, since PAR 1147 does not require additional water usage or demand, sufficient water supplies are expected to be available to serve the project from existing entitlements and resources, and no new or expanded entitlements would be needed.

### **Conclusion**

Based upon these considerations, significant adverse hydrology and water quality impacts are not expected from implementing PAR 1147. Since no significant hydrology and water quality impacts were identified, no mitigation measures are necessary or required.

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	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>X. LAND USE AND PLANNING.</b>				
Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Significance Criteria

Land use and planning impacts will be considered significant if the project conflicts with the land use and zoning designations established by local jurisdictions.

### Discussion

PAR 1147 will resolve current Rule 1147 NO<sub>x</sub> emissions compliance issues that have been raised by businesses. It is estimated that up to 3,900 existing facilities (4,900 to 5,650 out of 6,400 existing units) within SCAB will be affected by PAR 1147. PAR 1147 proposes to extend the compliance dates for small and low use equipment based on a longer equipment lifetime, change the emission limits for certain specific equipment to address technical feasibility of meeting a 30 ppm NO<sub>x</sub> limit, add a testing exemption, and clarify exemptions for certain equipment. Therefore, PAR 1147 is expected to result in NO<sub>x</sub> emission reductions foregone of up to 0.9 tons per day starting in 2017. However, the emission reductions foregone will be eventually recaptured because the existing units will be regularly replaced and upgraded over time. PAR 1147 does not require construction of new buildings, new add-on controls, or relocation of existing facilities. Therefore, construction activities or physical changes to the existing facilities are not expected to occur.

**X. a) No Impact.** PAR 1147 would not require any new development or require major modifications to buildings or other structures to comply with the new requirements for affected equipment at any of the currently existing facilities beyond what is currently required by Rule 1147. Therefore, PAR 1147 does not include any components that would require physically dividing an established community.

**X. b) No Impact.** There are no provisions in PAR 1147 that would affect land use plans, policies, or regulations. Land use and other planning considerations are determined by local governments and no land use or planning requirements would be altered by the affected operations beyond what is currently required by Rule 1147. Therefore, as already noted in the discussion in Section IV - Biological Resources, PAR 1147 would not affect any habitat conservation or natural community conservation plans, agricultural resources or operations, and would not create divisions in any existing communities. Present or planned land uses in the region would not be significantly adversely affected as a result of implementing PAR 1147.

**Conclusion**

Based upon these considerations, significant adverse land use and planning impacts are not expected from implementing PAR 1147. Since no significant land use and planning impacts were identified, no mitigation measures are necessary or required.

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	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>XI. MINERAL RESOURCES.</b> Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Significance Criteria

Project-related impacts on mineral resources will be considered significant if any of the following conditions are met:

- The project would result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.
- PAR 1147 results in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

### Discussion

PAR 1147 will resolve current Rule 1147 NO<sub>x</sub> emissions compliance issues that have been raised by businesses. It is estimated that up to 3,900 existing facilities (4,900 to 5,650 out of 6,400 existing units) within SCAB will be affected by PAR 1147. PAR 1147 proposes to extend the compliance dates for small and low use equipment based on a longer equipment lifetime, change the emission limits for certain specific equipment to address technical feasibility of meeting a 30 ppm NO<sub>x</sub> limit, add a testing exemption, and clarify exemptions for certain equipment. Therefore, PAR 1147 is expected to result in NO<sub>x</sub> emission reductions foregone of up to 0.9 tons per day starting in 2017. However, the emission reductions foregone will be eventually recaptured because the existing units will be regularly replaced and upgraded over time. PAR 1147 does not require construction of new buildings, new add-on controls, or relocation of existing facilities. Therefore, construction activities or physical changes to the existing facilities are not expected to occur.

**XI. a) & b) No Impact.** There are no provisions in PAR 1147 that would result in the loss of availability of a known mineral resource of value to the region and the residents of the state, or of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. Some examples of mineral resources are gravel, asphalt, bauxite, and gypsum, which are commonly used for construction activities or industrial processes. Since PAR 1147 will only to affect existing operations that do not use or duplicate mineral resources, PAR 1147 does not require and would not have any effects on the use of important minerals, such as those described above. Therefore, no new demand for mineral resources is expected to occur.

**Conclusion**

Based upon these considerations, significant adverse mineral resources impacts are not expected from implementing PAR 1147. Since no significant mineral resources impacts were identified, no mitigation measures are necessary or required.

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	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>XII. NOISE.</b> Would the project result in:				
a) Exposure of persons to or generation of permanent noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public use airport or private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Significance Criteria

Noise impact will be considered significant if:

- Construction noise levels exceed the local noise ordinances or, if the noise threshold is currently exceeded, project noise sources increase ambient noise levels by more than three decibels (dBA) at the site boundary. Construction noise levels will be considered significant if they exceed federal Occupational Safety and Health Administration (OSHA) noise standards for workers.
- The proposed project operational noise levels exceed any of the local noise ordinances at the site boundary or, if the noise threshold is currently exceeded, project noise sources increase ambient noise levels by more than three dBA at the site boundary.

### Discussion

PAR 1147 will resolve current Rule 1147 NO<sub>x</sub> emissions compliance issues that have been raised by businesses. It is estimated that up to 3,900 existing facilities (4,900 to 5,650 out of 6,400 existing units) within SCAB will be affected by PAR 1147. PAR 1147 proposes to extend the compliance dates for small and low use equipment based on a longer equipment lifetime, change the emission limits for certain specific equipment to address technical feasibility of meeting a 30 ppm NO<sub>x</sub> limit, add a testing exemption, and clarify exemptions for certain equipment. Therefore, PAR 1147 is expected to result in NO<sub>x</sub> emission reductions foregone of up to 0.9 tons per day starting in 2017. However, the emission reductions foregone will be eventually recaptured because

the existing units will be regularly replaced and upgraded over time. PAR 1147 does not require construction of new buildings, new add-on controls, or relocation of existing facilities. Therefore, construction activities or physical changes to the existing facilities are not expected to occur.

**XII. a) No Impact.** As discussed above, PAR 1147 would not require any new development or require major modifications to buildings or other structures to comply with PAR 1147 at any of the currently existing facilities beyond what is currently required by Rule 1147. PAR 1147 will provide relief to businesses by extending the compliance dates for small and low use equipment. Compliance dates will be extended for the expected life of these units (35 years) or when the equipment is replaced, rebuilt or moved to a different facility. This change will reduce compliance cost for affected businesses. The amendment will also change the emission limit for specific categories of equipment (e.g., incinerator section of burn off ovens and small units less than 325,000 Btu/hour) to address technical feasibility of meeting a 30 ppm NO<sub>x</sub> limit. Therefore, it is not expected that the affected facilities will need to change their current operations in order to comply with PAR 1147. Thus, PAR 1147 is not expected to expose persons to the generation of excessive noise levels above current facility levels. It is expected that any facility affected by PAR 1147 would continue complying with all existing local noise control laws or ordinances.

In commercial environments, Occupational Safety and Health Administration (OSHA) and California-OSHA have established noise standards to protect worker health. It is expected that operators at affected facilities will continue complying with applicable OSHA or Cal/OSHA noise standards, which would limit noise impacts to workers, patrons and neighbors.

**XII. b) No Impact.** PAR 1147 is not anticipated to expose people to, or generate excessive groundborne vibration or groundborne noise levels since complying with PAR 1147 is not expected to alter operations at affected facilities. Therefore, any existing noise or vibration levels at affected facilities are not expected to change as a result of implementing PAR 1147.

**XII. c) No Impact.** No increase in periodic or temporary ambient noise levels in the vicinity of affected facilities above levels existing prior to implementing PAR 1147 is anticipated because PAR 1147 would not require heavy-duty diesel-fueled construction-related activities nor would it change the existing activities currently performed by the affected operations. See also the response to items XII.a) and XII.b).

**XII. d) No Impact.** Even if an affected facility is located near a public/private airport, there are no new noise impacts expected from any of the existing facilities as a result of complying with PAR 1147. Similarly, any existing noise levels at affected facilities are not expected to increase appreciably. Thus, PAR 1147 is not expected to expose people residing or working in the vicinities of public airports to excessive noise levels.

### Conclusion

Based upon these considerations, significant adverse noise impacts are not expected from implementing PAR 1147. Since no significant noise impacts were identified, no mitigation measures are necessary or required.

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	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>XIII. POPULATION AND HOUSING.</b>				
Would the project:				
a) Induce substantial growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (e.g. through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Significance Criteria

Impacts of PAR 1147 on population and housing will be considered significant if the following criteria are exceeded:

- The demand for temporary or permanent housing exceeds the existing supply.
- The proposed project produces additional population, housing or employment inconsistent with adopted plans either in terms of overall amount or location.

### Discussion

PAR 1147 will resolve current Rule 1147 NO<sub>x</sub> emissions compliance issues that have been raised by businesses. It is estimated that up to 3,900 existing facilities (4,900 to 5,650 out of 6,400 existing units) within SCAB will be affected by PAR 1147. PAR 1147 proposes to extend the compliance dates for small and low use equipment based on a longer equipment lifetime, change the emission limits for certain specific equipment to address technical feasibility of meeting a 30 ppm NO<sub>x</sub> limit, add a testing exemption, and clarify exemptions for certain equipment. Therefore, PAR 1147 is expected to result in NO<sub>x</sub> emission reductions foregone of up to 0.9 tons per day starting in 2017. However, the emission reductions foregone will be eventually recaptured because the existing units will be regularly replaced and upgraded over time. PAR 1147 does not require construction of new buildings, new add-on controls, or relocation of existing facilities. Therefore, construction activities or physical changes to the existing facilities are not expected to occur.

**XIII. a) No Impact.** PAR 1147 will provide relief to businesses by extending the compliance dates for small and low use equipment. Compliance dates will be extended for the expected life of these units (35 years) or when the equipment is replaced, rebuilt or moved to a different facility. This change will reduce compliance cost for affected businesses. The amendment will also change the emission limit for specific categories of equipment (e.g., incinerator section of burn off ovens and small units less than 325,000 Btu/hour) to address technical feasibility of meeting a 30 ppm NO<sub>x</sub> limit. Therefore, it is not expected that the affected facilities will need to change their current operations in order to comply with PAR 1147. PAR 1147 is not anticipated to generate any significant adverse effects, either direct or indirect, on the population or population distribution within the SCAQMD's boundaries as no additional workers are anticipated to be required for

affected facilities to comply with PAR 1147 which relaxes existing requirements. Human population within the jurisdiction of the SCAQMD is anticipated to grow regardless of implementing PAR 1147. As such, PAR 1147 would not result in changes in population densities or induce significant growth in population.

**XIII. b) No Impact.** Because PAR 1147 does not require additional employees, PAR 1147 is not expected to result in the creation of any new industry that would affect population growth, directly or indirectly, induce the construction of single- or multiple-family units, or require the displacement of people elsewhere. Affected equipment is anticipated to be operated by the existing labor pool in southern California and would not warrant any new housing.

### **Conclusion**

Based upon these considerations, significant adverse population and housing impacts are not expected from implementing PAR 1147. Since no significant population and housing impacts were identified, no mitigation measures are necessary or required.

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	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>XIV. PUBLIC SERVICES.</b> Would the proposal result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:				
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Significance Criteria

Impacts on public services will be considered significant if the project results in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response time or other performance objectives.

### Discussion

PAR 1147 will resolve current Rule 1147 NO<sub>x</sub> emissions compliance issues that have been raised by businesses. It is estimated that up to 3,900 existing facilities (4,900 to 5,650 out of 6,400 existing units) within SCAB will be affected by PAR 1147. PAR 1147 proposes to extend the compliance dates for small and low use equipment based on a longer equipment lifetime, change the emission limits for certain specific equipment to address technical feasibility of meeting a 30 ppm NO<sub>x</sub> limit, add a testing exemption, and clarify exemptions for certain equipment. Therefore, PAR 1147 is expected to result in NO<sub>x</sub> emission reductions foregone of up to 0.9 tons per day starting in 2017. However, the emission reductions foregone will be eventually recaptured because the existing units will be regularly replaced and upgraded over time. PAR 1147 does not require construction of new buildings, new add-on controls, or relocation of existing facilities. Therefore, construction activities or physical changes to the existing facilities are not expected to occur.

**XIV. a) & b) No Impact.** PAR 1147 will provide relief to businesses by extending the compliance dates for small and low use equipment. Compliance dates will be extended for the expected life of these units (35 years) or when the equipment is replaced, rebuilt or moved to a different facility. This change will reduce compliance cost for affected businesses. The amendment will also change

the emission limit for specific categories of equipment (e.g., incinerator section of burn off ovens and small units less than 325,000 Btu/hour) to address technical feasibility of meeting a 30 ppm NO<sub>x</sub> limit. Therefore, it is not expected that the affected facilities will need to change their current operations in order to comply with PAR 1147 and PAR 1147 will not require additional public services beyond what is currently required by Rule 1147. PAR 1147 does not require any action which would alter and, thereby, adversely affect existing public services, or require an increase in governmental facilities or services to support the affected existing facilities. PAR 1147 will not result in the need for new or physically altered government facilities in order to maintain acceptable service ratios, response times, or other performance objectives because no change in operations is expected to occur at affected facilities.

Because PAR 1147 does not require or involve the use of new hazardous materials or generate new hazardous waste, it will not generate an emergency situation that would require additional fire or police protection, or impact acceptable service ratios or response times.

**XIV. c) & d) No Impact.** As indicated in discussion under Section XIII - Population and Housing, implementing PAR 1147 would not induce population growth or dispersion because no additional workers are expected to be needed at the existing affected facilities. Therefore, with no increase in local population anticipated as a result of adopting and implementing PAR 1147, additional demand for new or expanded schools or parks is also not anticipated. As a result, no significant adverse impacts are expected to local schools or parks.

### **Conclusion**

Based upon these considerations, significant adverse public service impacts are not expected from implementing PAR 1147. Since no significant public service impacts were identified, no mitigation measures are necessary or required.

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	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>XV. RECREATION.</b>				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment or recreational services?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Significance Criteria

Impacts to recreation will be considered significant if:

- The project results in an increased demand for neighborhood or regional parks or other recreational facilities.
- The project adversely affects existing recreational opportunities.

### Discussion

PAR 1147 will resolve current Rule 1147 NO<sub>x</sub> emissions compliance issues that have been raised by businesses. It is estimated that up to 3,900 existing facilities (4,900 to 5,650 out of 6,400 existing units) within SCAB will be affected by PAR 1147. PAR 1147 proposes to extend the compliance dates for small and low use equipment based on a longer equipment lifetime, change the emission limits for certain specific equipment to address technical feasibility of meeting a 30 ppm NO<sub>x</sub> limit, add a testing exemption, and clarify exemptions for certain equipment. Therefore, PAR 1147 is expected to result in NO<sub>x</sub> emission reductions foregone of up to 0.9 tons per day starting in 2017. However, the emission reductions foregone will be eventually recaptured because the existing units will be regularly replaced and upgraded over time. PAR 1147 does not require construction of new buildings, new add-on controls, or relocation of existing facilities. Therefore, construction activities or physical changes to the existing facilities are not expected to occur.

**XV. a) & b) No Impact.** PAR 1147 will provide relief to businesses by extending the compliance dates for small and low use equipment. Compliance dates will be extended for the expected life of these units (35 years) or when the equipment is replaced, rebuilt or moved to a different facility. This change will reduce compliance cost for affected businesses. The amendment will also change the emission limit for specific categories of equipment (e.g., incinerator section of burn off ovens and small units less than 325,000 Btu/hour) to address technical feasibility of meeting a 30 ppm NO<sub>x</sub> limit. Therefore, it is not expected that the affected facilities will need to change their current operations in order to comply with PAR 1147. As discussed in Section X - Land Use and Planning, there are no provisions in PAR 1147 that would affect land use plans, policies, or regulations. Land use and other planning considerations are determined by local governments. No land use or

planning requirements would be altered by the adoption of PAR 1147, which only affect certain types of combustion equipment. Further, PAR 1147 would not affect population growth or distribution within the SCAQMD's jurisdiction (see Section XIII – Population and Housing), in ways that could increase the demand for or use of existing neighborhood and regional parks or other recreational facilities or require the construction of new or expansion of existing recreational facilities that might have an adverse physical effect on the environment because it would not directly or indirectly increase or redistribute population.

**Conclusion**

Based upon these considerations, significant adverse recreation impacts are not expected from implementing PAR 1147. Since no significant recreation impacts were identified, no mitigation measures are necessary or required.

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	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>XVI. SOLID AND HAZARDOUS WASTE.</b> Would the project:				
a) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Comply with federal, state, and local statutes and regulations related to solid and hazardous waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Significance Criteria

The proposed project impacts on solid and hazardous waste will be considered significant if the following occurs:

- The generation and disposal of hazardous and non-hazardous waste exceeds the capacity of designated landfills.

### Discussion

PAR 1147 will resolve current Rule 1147 NO<sub>x</sub> emissions compliance issues that have been raised by businesses. It is estimated that up to 3,900 existing facilities (4,900 to 5,650 out of 6,400 existing units) within SCAB will be affected by PAR 1147. PAR 1147 proposes to extend the compliance dates for small and low use equipment based on a longer equipment lifetime, change the emission limits for certain specific equipment to address technical feasibility of meeting a 30 ppm NO<sub>x</sub> limit, add a testing exemption, and clarify exemptions for certain equipment. Therefore, PAR 1147 is expected to result in NO<sub>x</sub> emission reductions foregone of up to 0.9 tons per day starting in 2017. However, the emission reductions foregone will be eventually recaptured because the existing units will be regularly replaced and upgraded over time. PAR 1147 does not require construction of new buildings, new add-on controls, or relocation of existing facilities. Therefore, construction activities or physical changes to the existing facilities are not expected to occur.

**XVI. a) & b) No Impact.** PAR 1147 will provide relief to businesses by extending the compliance dates for small and low use equipment. Compliance dates will be extended for the expected life of these units (35 years) or when the equipment is replaced, rebuilt or moved to a different facility. This change will reduce compliance cost for affected businesses. The amendment will also change the emission limit for specific categories of equipment (e.g., incinerator section of burn off ovens and small units less than 325,000 Btu/hour) to address technical feasibility of meeting a 30 ppm NO<sub>x</sub> limit. Therefore, it is not expected that the affected facilities will need to change their current operations in order to comply with PAR 1147. PAR 1147 may require the replacement of burner equipment at the end of its useful life that could generate waste, however, the impacts would not be beyond what is currently required in Rule 1147; therefore, no new solid or hazardous waste impacts specifically associated with PAR 1147 are expected. No substantial change in the amount of solid or hazardous waste streams is expected to occur at affected facilities. The character of solid or hazardous waste streams are not expected to change as a result of the adoption of PAR 1147. PAR 1147 is not expected to increase the volume of solid or hazardous wastes from affected facilities, require additional waste disposal capacity, or generate waste that does not meet

applicable local, state, or federal regulations. Potential wastewater impacts are addressed in Section IX- Hydrology and Water Quality.

**Conclusion**

Based upon these considerations, significant adverse solid and hazardous waste impacts are not expected from implementing PAR 1147. Since no significant solid and hazardous waste impacts were identified, no mitigation measures are necessary or required.

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	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>XVII. TRANSPORTATION AND TRAFFIC.</b>				
Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Significance Criteria**

Impacts on transportation/traffic will be considered significant if any of the following criteria apply:

- Peak period levels on major arterials are disrupted to a point where level of service (LOS) is reduced to D, E or F for more than one month.
- An intersection's volume to capacity ratio increase by 0.02 (two percent) or more when the LOS is already D, E or F.
- A major roadway is closed to all through traffic, and no alternate route is available.
- The project conflicts with applicable policies, plans or programs establishing measures of effectiveness, thereby decreasing the performance or safety of any mode of transportation.
- There is an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system.
- The demand for parking facilities is substantially increased.
- Water borne, rail car or air traffic is substantially altered.
- Traffic hazards to motor vehicles, bicyclists or pedestrians are substantially increased.
- The need for more than 350 employees
- An increase in heavy-duty transport truck traffic to and/or from the facility by more than 350 truck round trips per day
- Increase customer traffic by more than 700 visits per day.

**Discussion**

PAR 1147 will resolve current Rule 1147 NO<sub>x</sub> emissions compliance issues that have been raised by businesses. It is estimated that up to 3,900 existing facilities (4,900 to 5,650 out of 6,400 existing units) within SCAB will be affected by PAR 1147. PAR 1147 proposes to extend the compliance dates for small and low use equipment based on a longer equipment lifetime, change the emission limits for certain specific equipment to address technical feasibility of meeting a 30 ppm NO<sub>x</sub> limit, add a testing exemption, and clarify exemptions for certain equipment. Therefore, PAR 1147 is expected to result in NO<sub>x</sub> emission reductions foregone of up to 0.9 tons per day starting in 2017. However, the emission reductions foregone will be eventually recaptured because the existing units will be regularly replaced and upgraded over time. PAR 1147 does not require construction of new buildings, new add-on controls, or relocation of existing facilities. Therefore, construction activities or physical changes to the existing facilities are not expected to occur.

**XVII. a) & b) No Impact.** PAR 1147 will provide relief to businesses by extending the compliance dates for small and low use equipment. Compliance dates will be extended for the expected life of these units (35 years) or when the equipment is replaced, rebuilt or moved to a different facility. This change will reduce compliance cost for affected businesses. The amendment will also change the emission limit for specific categories of equipment (e.g., incinerator section of burn off ovens and small units less than 325,000 Btu/hour) to address technical feasibility of meeting a 30 ppm NO<sub>x</sub> limit. Therefore, it is not expected that the affected facilities will need to change their current operations in order to comply with PAR 1147. PAR 1147 would not change or cause additional transportation demands or services because no change in operations at affected facilities is expected to occur beyond what is currently required by Rule 1147. Therefore, PAR 1147 would not increase traffic or adversely impact the existing traffic load and capacity of the street system, as the amount of product to be delivered is not anticipated to change nor generate additional services to affect transportation demand. Because PAR 1147 does

not require the immediate replacement of equipment, no increase in material delivery trips is expected as a result of PAR 1147.

Since no construction-related trips and no additional operational-related trips per facility are anticipated (see Section III – Air Quality and Greenhouse Gases), the adoption of PAR 1147 is not expected to significantly adversely affect circulation patterns on local roadways or the level of service at intersections near affected facilities. Since no construction is required, no significant construction traffic impacts are anticipated.

**XVII. c) No Impact.** PAR 1147 will not require operators of existing facilities to construct buildings or other structures or change the height and appearance of the existing structures, such that they could interfere with flight patterns. Therefore, adoption of PAR 1147 is not expected to adversely affect air traffic patterns. Further, PAR 1147 will not affect in any way air traffic in the region because it will not require transport of any PAR 1147 materials by air.

**XVII. d) No Impact.** No physical modifications are expected to occur by adopting PAR 1147 at the affected facilities. Additionally, no offsite modifications to roadways are anticipated for PAR 1147 that would result in an additional design hazard or incompatible uses.

**XVII. e) No Impact.** Equipment replacements or retrofits associated with adopting PAR 1147 are not expected to occur at the potentially affected existing facilities. Therefore, no changes to emergency access at or in the vicinity of the affected facilities would be expected. As a result, PAR 1147 is not expected to adversely impact emergency access.

**XVII. f) No Impact.** No changes to the parking capacity at or in the vicinity of the affected facilities are expected with adopting PAR 1147. Adoption of PAR 1147 does not change existing operations, so no new workers at affected facilities or area sources are expected. Since adoption of PAR 1147 is not expected to require additional workers, no traffic impacts are expected to occur and additional parking capacity will not be required. Therefore, PAR 1147 is not expected to adversely impact on- or off-site parking capacity. PAR 1147 has no provisions that would conflict with alternative transportation, such as bus turnouts, bicycle racks, et cetera.

### **Conclusion**

Based upon these considerations, significant adverse transportation and traffic impacts are not expected from implementing PAR 1147. Since no significant transportation and traffic impacts were identified, no mitigation measures are necessary or required.

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	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
<b>XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.</b>				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**XVIII. a) No Impact.** As discussed in Section IV - Biological Resources, PAR 1147 is not expected to significantly adversely affect plant or animal species or the habitat on which they rely because PAR 1147 affects specific types of combustion equipment, which are primarily located at existing established facilities. The installation of new equipment is anticipated to occur at existing affected facilities, but not beyond what is currently required by Rule 1147. In addition, all of the currently affected facilities are located at sites that have already been greatly disturbed and that currently do not support such habitats. PAR 1147 is not expected to induce construction of any new land use projects that could affect biological resources.

**XVIII. b) Potential Significant Impact.** Based on the foregoing analyses, some project-specific significant adverse environmental impacts in the answers for air quality are marked significant for project-specific adverse impacts (see Section III). The cumulative effects of PAR 1147 for the topic of air quality have been identified as potentially significant because the impacts are not

known at this time and will be evaluated for project-specific and cumulative adverse effects in the Draft EA. Therefore, potentially significant air quality impacts identified for project-specific adverse impacts are also potentially significant for cumulative adverse impacts.

No environmental topics were identified as ‘Less Than Significant Impact’ or ‘Less Than Significant with Mitigation’. The environmental topics identified as having ‘No Impact’ include aesthetics, agriculture and forestry resources, biological resources, cultural resources, energy, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, solid and hazardous waste, and transportation and traffic (see Sections I., II., IV., V., VI., VII., VIII., IX., X., XI., XII., XIII., XIV., XV., XVI., and XVII.). SCAQMD significance thresholds are the same for project-specific impacts and cumulative impacts; therefore, environmental topic answers that are identified as ‘No Impact’ for project-specific impacts would not be expected to make any contribution to potential cumulative impacts whatsoever. Therefore, environmental topics identified as ‘No Impact’ for project-specific impacts are not expected to be significant for cumulative adverse impacts; therefore, no mitigation is necessary. Therefore, the topic areas identified as ‘No Impact’ will not be evaluated further in the Draft EA.

**XVIII. c) Potential Significant Impact.** Some air quality adverse impacts from implementing PAR 1147 were identified as potentially significant and will be evaluated in the Draft EA (see Section III.). The direct and indirect adverse effects upon human beings for these potentially significant adverse impacts will be evaluated in the Draft EA.

### **Conclusion**

As previously discussed in Sections I through XVIII, the proposed project has no potential to cause significant adverse environmental effects for all areas except for air quality (see Section III). Potentially significant adverse air quality impacts from the adoption and implementation of PAR 1147 will be further evaluated in the Draft EA.

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## **APPENDIX A**

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### **PROPOSED AMENDED RULE 1147**



**RULE 1147                      NO<sub>x</sub> REDUCTIONS FROM MISCELLANEOUS SOURCES**

(a) Purpose and Applicability

The purpose of this rule is to reduce nitrogen oxide emissions from gaseous and liquid fuel fired combustion equipment as defined in this rule. This rule applies to ovens, dryers, dehydrators, heaters, kilns, calciners, furnaces, crematories, incinerators, heated pots, cookers, roasters, fryers, closed and open heated tanks and evaporators, distillation units, afterburners, degassing units, vapor incinerators, catalytic or thermal oxidizers, soil and water remediation units and other combustion equipment with nitrogen oxide emissions that require a District permit and are not specifically required to comply with a nitrogen oxide emission limit by other District Regulation XI rules. This rule does not apply to solid fuel-fired combustion equipment, internal combustion engines subject to District Rule 1110.2, turbines, food ovens, charbroilers, or boilers, water heaters, thermal fluid heaters and enclosed process heaters subject to District Rules 1109, 1146, 1146.1, or 1146.2 and equipment subject to District Rules 1111, 1112, 1117, 1118, 1121, ~~or~~ 1135, or 1153.1.

(b) Definitions

- (1) ANNUAL CAPACITY FACTOR means the ratio of the ANNUAL HEAT INPUT of a unit in a calendar year to the amount of fuel it could have burned if it had operated at the rated heat input capacity for 100 percent of the time during the calendar year.
- (2) ANNUAL HEAT INPUT means the actual amount of heat released by fuels burned in a unit during a calendar year, based on the fuel's higher heating value.
- (3) BTU means British thermal unit or units.
- (4) COMBUSTION MODIFICATION means replacement of a burner(s) or any modification of the burner, fuel system or combustion air supply that changes the RATED HEAT INPUT CAPACITY of the burner(s).
- (5) FOOD OVEN means an oven, cooker, dryer, roaster, or other fuel-fired unit, excluding fryer, used to heat, ~~or~~ cook, dry, roast, or prepare food, food products, or products used for making beverages for human consumption.

- (6) HEATER means any combustion equipment that is fired with gaseous and/or liquid fuels and which transfers heat from combusted fuel to materials or air contained in the unit or in an adjoining cabinet, container or structure. Heater does not include any boiler or PROCESS HEATER designed to transfer heat to water or process streams that is subject to any NOx emission limits of District Rules 1109, 1146, 1146.1 or 1146.2, and does not include any internal combustion engine or turbine.
- (7) HEAT INPUT means the higher heating value of the fuel to the unit measured as BTU per hour.
- (8) HEAT OUTPUT means the enthalpy of the working fluid output of the unit.
- (9) INFRARED BURNER means a burner with:
- (A) Ceramic, metal fiber, sintered metal, or perforated metal flame-holding surface;
  - (B) More than 50% of the heat output as infrared radiation and that is operated in a manner where the zone including and above the flame-holding surface is red and does not produce observable blue or yellow flames in excess of ½ inch (13 mm) in length; and
  - (C) A RATED HEAT INPUT CAPACITY per square foot of flame holding surface of 100,000 BTU per hour or less.
- ~~(109)~~ IN-USE UNIT means any UNIT that is demonstrated to the Executive Officer that it was in operation at the current location prior to January 1, 2010.
- ~~(119)~~ MAKE-UP AIR HEATER means a UNIT used to heat incoming air in order to maintain the temperature of a spray booth, container, room or other enclosed space where a person is working including spray booths that are also used for drying coatings and auto body spray booths with an adjacent contiguous section for drying automobile coatings. A MAKE-UP AIR HEATER is not a burner used to heat an oven, dryer, heater or other unit where workers are not present during heating.
- ~~(124)~~ NOx EMISSIONS means the sum of nitrogen oxide and nitrogen dioxide in the flue gas, collectively expressed as nitrogen dioxide.
- ~~(132)~~ PROCESS HEATER means any equipment that is fired with gaseous and/or liquid fuels and which transfers heat from combusted fuel to water or process streams. PROCESS HEATER does not include any fryer or

any furnace, kiln or oven used for melting, heat treating, annealing, drying, curing, baking, cooking, calcining, or vitrifying; any heated tank; or any unfired waste heat recovery heater that is used to recover sensible heat from the exhaust of any combustion equipment.

- (143) PROTOCOL means a South Coast Air Quality Management District approved test protocol for determining compliance with emission limits for applicable equipment.
- (154) RATED HEAT INPUT CAPACITY means the gross HEAT INPUT of the combustion UNIT specified on a permanent rating plate attached by the manufacturer to the device. If the UNIT has been altered or modified such that its gross HEAT INPUT is higher or lower than the rated HEAT INPUT capacity specified on the original manufacturer's permanent rating plate, the new gross HEAT INPUT shall be considered as the rated HEAT INPUT capacity.
- (165) REMEDIATION UNIT means a device used to capture or incinerate air toxics, VOCs or other combustible vapors extracted from soil or water.
- (176) RESPONSIBLE OFFICIAL means:
- (A) For a corporation: a president or vice-president of the corporation in charge of a principal business function or a duly authorized person who performs similar policy-making functions for the corporation; or
  - (B) For a partnership or sole proprietorship: general partner or proprietor, respectively.
  - (C) For a government agency: a duly authorized person
- (187) TENTER FRAME DRYER is a cloth dryer that holds the edges of the material as it is dried in order to control shrinkage.
- (198) THERM means 100,000 BTU.
- (2019) UNIT means any oven, dryer, dehydrator, heater, kiln, calciner, furnace, crematory, incinerator, heated pot, cooker, roaster, fryer, heated tank and evaporator, distillation unit, afterburner, degassing unit, vapor incinerator, catalytic or thermal oxidizer, soil or water remediation units and other combustion equipment with nitrogen oxide emissions requiring a District permit and not specifically required to comply with a NOx emission limit by other District Regulation XI rules. UNIT does not mean any solid fuel fired combustion equipment, internal combustion engine subject to District

Rule 1110.2, turbine, charbroiler, or boiler, water heater, thermal fluid heaters or enclosed process heater subject to District Rules 1109, 1146, 1146.1, or 1146.2 or equipment subject to District Rules 1111, 1112, 1117, 1118, 1121, ~~or 1135~~, or 1153.1.

(219) VAPOR INCINERATOR means a furnace, afterburner, or other device for burning and destroying air toxics, VOCs or other combustible vapors in gas or aerosol form in gas streams.

(c) Requirements

- (1) On or after January 1, 2010 any person owning or operating a unit subject to this rule shall not operate the unit in a manner that exceeds the applicable nitrogen oxide emission limit specified in Table 1 at the time a District permit is required for operation of a new, relocated or modified unit or, for in-use units, in accordance with the compliance schedule in Table 2, or at the time of a combustion modification.

**Table 1 – NO<sub>x</sub> Emission Limit**

Equipment Category(ies)	NO <sub>x</sub> Emission Limit		
	PPM @ 3% O <sub>2</sub> , dry or Pound/mmBtu heat input		
	Process Temperature		
<b>Gaseous Fuel-Fired Equipment</b>	≤ 800° F	> 800 ° F and < 1200° F	≥ 1200 ° F
Asphalt Manufacturing Operation	40 ppm	40 ppm	
Afterburner, Degassing Unit, Remediation Unit, Thermal Oxidizer, Catalytic Oxidizer or Vapor Incinerator <sup>1</sup>	<del>360</del> ppm or 0.0 <del>73</del> <del>36</del> lb/mmBtu	60 ppm or 0.073 lb/mmBtu	60 ppm or 0.073 lb/mmBtu
<u>Crematory or Incinerator</u>	<u>60 ppm or 0.073 lb/mmBtu</u>	<u>60 ppm or 0.073 lb/mmBtu</u>	<u>60 ppm or 0.073 lb/mmBtu</u>
<u>Dual Chamber Burn-off Furnace, Burnout Oven, Incinerator or Crematory with Integrated Afterburner</u>	<u>60 ppm or 0.073 lb/mmBtu</u>	<u>60 ppm or 0.073 lb/mmBtu</u>	<u>60 ppm or 0.073 lb/mmBtu</u>
Evaporator, Fryer, Heated Process Tank, or Parts Washer	60 ppm or 0.073 lb/mmBtu	60 ppm or 0.073 lb/mmBtu	
Metal Heat Treating, Metal Melting Furnace, Metal Pot, or Tar Pot	60 ppm or 0.073 lb/mmBtu	60 ppm or 0.073 lb/mmBtu	60 ppm or 0.073 lb/mmBtu
Oven, Dehydrator, Dryer, Heater, Kiln, <del>Crematory, Incinerator</del> , Calciner, Cooker, Roaster, Furnace, or Heated Storage Tank <u>with unit heat rating ≥ 325,000 BTU/hour</u>	30 ppm or 0.036 lb/mmBtu	30 ppm or 0.036 lb/mmBtu	60 ppm or 0.073 lb/mmBtu
Make-Up Air Heater or other Air Heater located outside of building with temperature controlled zone inside building	30 ppm or 0.036 lb/mmBtu		
Tenter Frame or Fabric or Carpet Dryer	30 ppm or 0.036 lb/mmBtu		
Other Unit or Process Temperature <u>with unit heat rating ≥ 325,000 BTU/hour</u>	30 ppm or 0.036 lb/mmBtu	30 ppm or 0.036 lb/mmBtu	60 ppm or 0.073 lb/mmBtu
<u>Oven, Dehydrator, Dryer, Heater, Kiln, Calciner, Cooker, Roaster, Furnace, Heated Storage Tank or Other Unit with unit heat rating &lt; 325,000 BTU/hour</u>	<u>60 ppm or 0.073 lb/mmBtu</u>	<u>60 ppm or 0.073 lb/mmBtu</u>	<u>60 ppm or 0.073 lb/mmBtu</u>
<b>Liquid Fuel-Fired Equipment</b>	≤ 800° F	> 800 ° F and < 1200° F	≥ 1200 ° F
All liquid fuel-fired Units	40 ppm or 0.053 lb/mmBtu	40 ppm or 0.053 lb/mmBtu	60 ppm or 0.080 lb/mmBtu

1. Emission limit applies to burners in units fueled by 100% natural gas that are used to incinerate air toxics, VOCs, or other vapors; or to heat a unit. The emission limit applies solely when burning 100% fuel and not when the burner is incinerating air toxics, VOCs, or other vapors. The unit shall be tested or certified to meet the emission limit while fueled with natural gas.

**Table 2 – Compliance Schedule for In-Use Units**

<b>Equipment Category(ies)</b>	<b>Submit Permit Application</b>	<b>Unit Shall Be in Compliance</b>
Remediation UNIT manufactured prior to 1998	Seven months prior to combustion modification or change of location.	Upon combustion modification or change of location beginning March 1, 2012
Tar Pot		All new permit applications beginning January 1, 2013
Afterburner, degassing unit, catalytic oxidizer, thermal oxidizer, vapor incinerator, evaporator, <del>food oven</del> , fryer, heated process tank, parts washer or spray booth make-up air heater manufactured prior to 1998	December 1, 2013	July 1, 2014
Other UNIT manufactured prior to 1986	December 1, 2011	July 1, 2012
Other UNIT manufactured prior to 1992	December 1, 2011	July 1, 2012
Other UNIT manufactured prior to 1998	December 1, 2012	July 1, 2013
Any UNIT manufactured after 1997	December 1 of the year prior to the compliance date	July 1 of the year the unit is 15 years old

- (2) Unit age shall be based on:
- (A) The original date of manufacture as determined by:
- (i) Original manufacturer's identification or rating plate permanently fixed to the equipment. If not available, then;
  - (ii) Invoice from manufacturer for purchase of equipment. If not available, then;
  - (iii) Information submitted to ~~the District AQMD~~ with prior permit applications for the specific unit. If not available, then;
  - (iv) Unit is deemed by ~~the District AQMD~~ to be 20 years old as of July 1, 2012; or
- (B) The date that operations start for a tunnel kiln or crematory rebuilt prior to January 1, 2010 with new burner(s) as determined by:
- (i) Production or fuel usage records after burner installation, and
  - (ii) Invoice for burner(s) installation. If not available, then;
  - (iii) Invoice for burner(s) purchase, If not available, then;

- (iv) Manufacture date of burner(s) as identified by an attached manufacturers identification or rating plate or date stamp.
- (3) In accordance with the schedule in the permit, owners or operators of units shall determine compliance with the emission limit specified in Table 1 using a District approved test protocol. The test protocol shall be submitted to the District at least 90 days prior to the scheduled test and approved by the District Source Testing Division.
- (4) Notwithstanding the requirements of paragraph (c)(1), units with combustion modifications completed prior to December 5, 2008 and after January 1, 2000 that resulted in replacement of more than 75% of the rated heat input capacity shall comply with the applicable emission limit specified in Table 1 of paragraph (c)(1) ten years from the date the modification was performed.
- (5) The date a combustion modification, as specified in paragraphs (c)(1) and (c)(4), is performed; shall be determined according to subparagraph (c)(2)(B), if not available, then subparagraph (c)(2)(C).
- (6) Notwithstanding the requirements of paragraph (c)(1), an in-use unit with a District permit to construct or permit to operate prior to January 1, 2010; or and an afterburner, degassing unit, thermal oxidizer, catalytic oxidizer, vapor incinerator, or spray booth make-up air heater installed with a District permit prior to March 1, 2012 with emissions of less than one pound per day ~~or less~~ of nitrogen oxides, may defer compliance with the applicable emission limit specified in Table 1 of paragraph (c)(1) until a combustion modification; the unit is replaced, relocated, or rebuilt; or December 1 of the year the unit is 35 years old. A unit with NOx emissions less than one pound per day that becomes 35 years old before December 1, 2017, shall comply with the emission limit on and after December 1, 2018. The age of the unit shall be determined according to subparagraph (c)(2)(A) for up to five years from the applicable compliance date in Table 2 of (e)(1). NOx emissions of less than one pound per day ~~or less~~ shall be demonstrated by compliance with one of the following requirements:
- (A) ~~A unit has a rated heat input capacity of 400,000 Btu or less.~~
- (B) ~~The unit as of September 9, 2011 has a NOx permit emission limit of one pound per day or less, a permit condition with a process~~

~~limit that results in one pound per day or less of NOx emissions including but not limited to fuel use, material throughput or operating schedule, or actual operations that results in one pound per day or less of NOx emissions. Daily operating records of unit fuel use or process rate and daily operating hours demonstrating that starting January 1, 2012 until the date of compliance, the unit has a maximum emission rate of 1 pound of NOx per day.~~

- (A) A rated heat input capacity of less than 325,000 BTU per hour;
- (B) A permit condition that limits NOx emissions to less than 1 pound per day;
- (C) Monthly recordkeeping of unit use documenting average emissions of less than one pound per day with a unit-specific non-resettable time meter or a non-resettable unit fuel meter with fuel use corrected to standard temperature and pressure. Owners or operators of units with installed calibrated non-resettable totalizing time or fuel meters may elect to comply with the requirements of (c)(6) by ~~requesting, no later than January 1, 2012, unit permit conditions of limits on operating hours per calendar month and/or a fuel meter and a limit on the amount of fuel use per~~ demonstrating each calendar month ~~so that~~ monthly NOx emissions are less than 2230 pounds or less. Monthly emissions with a time meter shall be calculated using the unit's maximum hourly emission rate in pounds multiplied by the hours of operation each calendar month. The maximum hourly emission rate shall be equal to the rated heat input capacity of the unit multiplied by the unit's emissions at the rated heat input capacity in pound per million Btu. Monthly emissions calculated with a fuel meter shall be equal to the unit's emission rate per unit of fuel multiplied by the amount of fuel, corrected to standard temperature and pressure, used that calendar month-;



- (D) Daily recordkeeping of unit operation and the following specified rated heat input capacities operating less than or equal to the specified number of hours per day:

**Table 3 – Small and Low Use Unit Daily Operating Limits**

<u>Unit Rating (Btu/hour)</u>	<u>Daily Hour Limit</u>
<u>325,000 to 400,000</u>	<u>16</u>
<u>400,001 to 500,000</u>	<u>14</u>
<u>500,001 to 800,000</u>	<u>8</u>
<u>800,001 to 1,000,000</u>	<u>6</u>
<u>1,000,001 to 1,200,000</u>	<u>5</u>

- (E) Daily recordkeeping of unit operation and the following specified rated heat input capacities operating less than or equal to the specified number of hours per calendar month:

**Table 4 – Small and Low Use Unit Monthly Operating Limits**

<u>Unit Rating (Btu/hour)</u>	<u>Monthly Hour Limit</u>
<u>325,000 to 400,000</u>	<u>352</u>
<u>400,001 to 500,000</u>	<u>308</u>
<u>500,001 to 800,000</u>	<u>176</u>
<u>800,001 to 1,000,000</u>	<u>132</u>
<u>1,000,001 to 1,200,000</u>	<u>110</u>

- (F) Daily unit natural gas use less than or equal to 7,692 cubic feet per day at standard temperature and pressure, documented by daily recordkeeping of gas consumption with a non-resettable fuel meter.

Owners or operators of units complying under this paragraph that fail to continuously demonstrate compliance with the applicable heat input rating, permit condition, or daily or monthly requirements of this paragraph shall comply with the applicable emission limit in Table 1 by the applicable compliance date in Table 2 or within 210 days from the date

the unit first fails to continuously comply with the daily or monthly emission limit whichever is later. A unit that must demonstrate compliance with an emission limit pursuant to this provision shall comply with the applicable emission limit for the life of the unit.

- (7) On or after January 1, 2010, any person owning or operating a unit subject to this rule shall perform combustion system maintenance in accordance with the manufacturer's schedule and specifications as identified in the manual and other written materials supplied by the manufacturer or distributor. The owner or operator shall maintain on site at the facility where the unit is being operated a copy of the manufacturer's, distributor's, installer's or maintenance company's written maintenance schedule and instructions and retain a record of the maintenance activity for a period of not less than three years. The owner or operator shall maintain on site at the facility where the unit is being operated a copy of the District certification or District approved source test reports, conducted by an independent third party, demonstrating the specific unit complies with the emission limit. The source test report(s) must identify that the source test was conducted pursuant to a District approved protocol. The model and serial numbers of the specified unit shall clearly be indicated on the source test report(s). The owner or operator shall maintain on the unit in an accessible location a permanent rating plate. The maintenance instructions, maintenance records and the source test report(s) or District certification shall be made available to the Executive Officer upon request.
- (8) Any person owning or operating a unit subject to this rule complying with Table 1 using pounds per million BTU, shall install and maintain in service non-resettable, totalizing, fuel meters for each unit's fuel(s) prior to the compliance determination specified in paragraph (c)(3). Owners or operators of a unit with a combustion system that operates at only one firing rate that comply with an emission limit using pounds per million BTU shall install a non-resettable, totalizing, time or fuel meter for each fuel.
- (9) Meters that require electric power to operate shall be provided a permanent supply of electric power that cannot be unplugged, switched off, or reset except by the main power supply circuit for the building and associated

equipment or the unit's safety shut-off switch. Any person operating a unit subject to this rule shall not shut off electric power to a unit meter unless the unit is not operating and is shut down for maintenance or safety.

- (10) On or before the compliance date, the owner or operator of a unit shall demonstrate compliance with the applicable emission limit in Table 1 pursuant to the provisions of subdivisions (d) or (e).

(11) Compliance by Certification

For units that do not allow adjustment of the fuel and combustion air for the combustion system by the owner or operator, and upon approval by the Executive Officer, an owner or operator may demonstrate compliance with the emission limit and demonstration requirement of this subdivision by certification granted to the manufacturer for any model of equipment sold for use in the District. Any unit certified pursuant to subdivision (e) shall be deemed in compliance with the emission limit in Table 1 and demonstration requirement of this subdivision, unless a District source test shows non-compliance.

(12) Identification of Units

(A) New Manufactured Units

The manufacturer shall display the model number and the rated heat input capacity of the unit complying with subdivision (c) on a permanent rating plate. The manufacturer shall also display the District certification status on the unit when applicable.

(B) Modified Units

The owner or operator of a unit with a modified combustion system (new or modified burners) shall display the new rated heat input capacity on a new permanent supplemental rating plate installed in an accessible location on the unit or burner. The gross heat input shall be based on the maximum fuel input corrected for fuel heat content, temperature and pressure. Gross heat input shall be demonstrated by a calculation based on fuel consumption recorded by an in-line fuel meter by the manufacturer or installer.

- (13) The owner or operator shall maintain on site a copy of all documents identifying the unit's rated heat input capacity for as long as the unit is retained on-site. The rated heat input capacity shall be identified by a manufacturer's or distributor's manual or invoice and a permanent rating

plate attached to the unit. If a unit is modified, the rated heat input capacity shall be calculated pursuant to subparagraph (c)(12)(B). The documentation of rated heat input capacity for modified units shall include the name of the company and person modifying the unit, a description of all modifications, the dates the unit was modified and calculation of rated heat input capacity. The documentation for modified units shall be signed by the highest ranking person modifying the unit.

~~(14) — Alternate Compliance Plans~~

- ~~(A) — Owners or operators of facilities with five or more in-use units with permit emissions greater than one pound per day NO<sub>x</sub> that will require burner modifications may submit an alternate compliance plan by January 1, 2012 to phase in compliance of all units starting April 1, 2012 and ending before January 1, 2015. The alternate compliance plan shall identify the units included in the plan and a schedule identifying when each unit will comply with the emission limit and the compliance determination for each unit will be completed. At least one unit shall be modified to comply with the applicable emission limit of this rule by April 1, 2012. Each year thereafter, a minimum of 20 percent of additional units and no less than one unit shall be modified to comply with the applicable emission limit. All units must comply with the applicable emission limit of this rule before January 1, 2015.~~
- ~~(B) — Owners or operators of facilities with pollution control unit(s) in series with process unit(s) (e.g., an oven and afterburner) that have NO<sub>x</sub> emissions greater than one pound per day and different compliance dates may elect to synchronize compliance of all units in the series on one date no later than December 1, 2013.~~

(d) Compliance Determination

- (1) All compliance determinations pursuant to paragraph (c)(6) shall be calculated:
- (A) Using a District approved test protocol averaged over a period of at least 15 and no more than 60 consecutive minutes;
  - (B) After unit start up; and
  - (C) In the unit's as-found operating condition.

Each compliance determination shall be made in the maximum heat input range at which the unit normally operates. An additional compliance determination shall be made using a heat input of less than 35% of the rated heat input capacity for any of the following types of units with process temperature less than 1200 °F that operate with variable heat input that falls below 50% rated heat input capacity during normal operation: Make-Up Air Heater, other Air Heater located outside of process building, Oven, Dehydrator, Dryer, Tenter-Frame Dryer, Fabric Dryer, Carpet Dryer, Heater, Cooker, Roaster, non-metallurgical Furnace, or Heated Storage Tank.

For compliance determinations after the initial approved test, the operator is not required to resubmit a protocol for approval if: there is a previously approved protocol and the unit has not been altered in a manner that requires a permit alteration; and rule or permit emission limits have not ~~changed~~ become more stringent since the previous test.

- (2) All parts per million emission limits specified in subdivision (c) are referenced at 3 percent volume stack gas oxygen on a dry basis.
- (3) Compliance with the NO<sub>x</sub> emission limits of subdivision (c) and determination of stack-gas oxygen and carbon dioxide concentrations for this rule shall be determined according to the following procedures:
  - (A) District Source Test Method 100.1 – Instrumental Analyzer Procedures for Continuous Gaseous Emission Sampling (March 1989); or
  - (B) ASTM Method D6522-00 – Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers; or
  - (C) United States Environmental Protection Agency Conditional Test Method CTM-030 – Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Emissions from Natural Gas-Fired Engines, Boilers and Process Heaters Using Portable Analyzers; or
  - (D) District Source Test Method 7.1 – Determination of Nitrogen Oxide Emissions from Stationary Sources (March 1989); and

- (E) District Source Test Method 10.1 – Carbon Monoxide and Carbon Dioxide by Gas Chromatograph/Non-Dispersive Infrared Detector (GC/NDIR) – Oxygen by Gas Chromatograph-Thermal Conductivity (GC/TCD) (March 1989); or
  - (F) Any alternative test method determined approved before the test in writing by the Executive Officers of the District, the California Air Resources Board and the United States Environmental Protection Agency.
- (4) For any operator who chooses to comply using pound per million Btu, NO<sub>x</sub> emissions in pounds per million Btu of heat input shall be calculated using procedures in 40 CFR Part 60, Appendix A, Method 19, Sections 2 and 3.
  - (5) Records of source tests shall be maintained for ten years and made available to District personnel upon request. Emissions determined to exceed any limits established by this rule through the use of any of the test methods specified in subparagraphs (d)(3)(A) through (d)(3)(F) shall constitute a violation of this rule.
  - (6) All compliance determinations shall be made using an independent contractor to conduct testing, which is approved by the Executive Officer under the Laboratory Approval Program for the applicable test methods.
  - (7) For equipment with two or more units in series or multiple units with a common exhaust or units with one dual purpose burner that both heats the process and incinerates VOC, toxics or PM, the owner or operator may demonstrate compliance with the emission limits in Table 1 by one of the following:
    - (A) Test each unit separately and demonstrate each unit's compliance with the applicable limit, or
    - (B) Test only after the last unit in the series and at the end of a common exhaust for multiple units ~~or dual purpose burner~~, when all units are operating, and demonstrate that the series of units either meet:
      - (i) The lowest emission limit in Table 1 applicable to any of the units in series, or

- (ii) A heat input weighted average of all the applicable emission limits in Table 1 using the following calculation.

$$\text{Weighted Limit} = \frac{\sum [ (EL_X) * (Q_X) ]}{\sum [ Q_X ]}$$

**Where:**

EL<sub>X</sub> = emission limit for unit X

Q<sub>X</sub> = total heat input for unit X during test

(e) Certification

(1) Unit Certification

For units that do not allow adjustment of the fuel and combustion air for the combustion system by the owner or operator, any manufacturer or distributor that distributes for sale or sells units or burner systems for use in the District may elect to apply to the Executive Officer to certify such units or burner systems as compliant with subdivision (c).

(2) Manufacturer Confirmation of Emissions

Any manufacturer's application to the Executive Officer to certify a model of equipment as compliant with the emission limit and demonstration requirement of subdivision (c) shall obtain confirmation from an independent contractor that is approved by the Executive Officer under the Laboratory Approval Program for the necessary test methods prior to applying for certification that each unit model complies with the applicable requirements of subdivision (c). This confirmation shall be based upon District approved emission tests of standard model units and a District approved protocol shall be adhered to during the confirmation testing of all units subject to this rule. Emission testing shall comply with the requirements of paragraphs (d)(1) through (d)(5) except emission determinations shall be made at 100% rated heat input capacity and an additional emission determination shall be made using a heat input of less than 35% of the rated heat input capacity for any Afterburner, Degassing Unit, Remediation Unit, Thermal Oxidizer, Catalytic Oxidizer, Vapor Incinerator, Make-Up Air Heater, other Air Heater located outside of process building, Oven, Dehydrator, Dryer, Tenter-Frame Dryer, Fabric

Dryer, Carpet Dryer, Heater, Kiln, Crematory, Incinerator, Calciner, Cooker, Roaster, non-metallurgical Furnace, or Heated Storage Tank.

- (3) When applying for unit(s) certification, the manufacturer shall submit to the Executive Officer the following:
  - (A) A statement that the model is in compliance with subdivision (c). The statement shall be signed and dated by the manufacturer's responsible official and shall attest to the accuracy of all statements;
  - (B) General Information
    - (i) Name and address of manufacturer,
    - (ii) Brand name, if applicable,
    - (iii) Model number, as it appears on the unit rating plate; and
    - (iv) Rated Heat Input Capacity, gross output of burner(s) and number of burners;
  - (C) A description of each model being certified; and
  - (D) A source test report verifying compliance with the applicable emission limit in subdivision (c) for each model to be certified. The source test report shall be prepared by the confirming independent contractor and shall contain all of the elements identified in the District approved Protocol for each unit tested. The source test shall have been conducted no more than ninety (90) days prior to the date of submittal to the Executive Officer.
- (4) When applying for unit certification, the manufacturer shall submit the information identified in paragraph (e)(3) no more than ninety (90) days after the date of the source test identified in subparagraph (e)(3)(D) and at least 120 days prior to the date of the proposed sale and installation of any District certified unit.
- (5) The Executive Officer shall certify a unit model which complies with the provisions of subdivision (c) and of paragraphs (e)(2), (e)(3), and (e)(4).
- (6) Certification status shall be valid for five years from the date of approval by the Executive Officer. After the fifth year, recertification shall be required by the Executive Officer according to the requirements of paragraphs (e)(2), (e)(3), and (e)(4).

- (f) Enforcement



- (1) The Executive Officer may inspect certification records and unit installation, operation, maintenance, repair, combustion modification and test records of owners, operators, manufacturers, distributors, retailers, and installers of units located in the District, and conduct such tests as are deemed necessary to ensure compliance with this rule. Tests shall include emission determinations, as specified in paragraph (d)(1) to (d)(4), of a random sample of any category of units subject to this rule.
  - (2) An emission determination specified under paragraph (f)(1) that finds emissions in excess of those allowed by this rule or permit conditions shall constitute a violation of this rule.
- (g) Exemptions
- (1) The provisions of this rule shall not apply to units:
    - (A) subject to the nitrogen oxide limits of District Rules 1109, 1110.2, 1111, 1112, 1117, 1121, 1134, 1135, 1146, 1146.1, ~~or 1146.2,~~ or 1153.1; or
    - (B) located at RECLAIM facilities.
  - (2) The provisions of this rule shall not apply to charbroilers or food ovens.
  - (3) The provisions of this rule shall not apply to:
    - (A) Flares subject to District Rule 1118;
    - (B) Flares, afterburners, degassing units, thermal or catalytic oxidizers or vapor incinerators in which a fuel, including but not limited to natural gas, propane, butane or liquefied petroleum gas, is used only to maintain a pilot for vapor ignition or is used for five minutes or less to bring a unit up to operating temperature;
    - (C) Municipal solid waste incinerators with a District permit operating before December 5, 2008;
    - (D) An afterburner or vapor incinerator with a District permit operating before December 5, 2008 that has an integrated thermal fluid heat exchanger that captures heat from the afterburner or vapor incinerator and an oven or furnace exhaust in order to reduce fuel consumption by an oven or the afterburner or vapor incinerator; or
    - (E) A flare, afterburner, degassing unit, remediation unit, thermal oxidizer, catalytic oxidizer or vapor incinerator process in which ~~a fuel, including but not limited to natural gas, propane, butane or~~

~~liquefied petroleum gas, is mixed with particulate matter,~~ air toxics, VOCs, landfill gas, digester gas or other combustible vapors are mixed in the unit's burner with primary combustion air or fuel, including but not limited to natural gas, propane, butane or liquefied petroleum gas, prior to incineration in the unit, in order to maintain vapor concentration above the upper explosion limit or above a manufacturer specified limit in order to maintain combustion or temperature in the unit. This exemption does not apply to a regenerative thermal or catalytic oxidizer unit with a burner ~~with a separate fuel line~~ used to heat up or maintain temperature of ~~the~~ unit or a unit that incinerates particulate matter, air toxics, VOCs or other combustible vapors in a gas stream moving past the burner flame.

- (4) ~~New a~~Afterburners, degassing units, thermal oxidizers, catalytic oxidizers, vapor incinerators, and spray booth make-up air heaters installed for use at a specific facility after December 5, 2008 and before March 1, 2012, are exempt from the emission limit in Table 1 until July 1 of the year the unit is 15 years old.
- (5) ~~New or relocated r~~Remediation units installed after December 5, 2008 and before March 1, 2012, are exempt from the emission limit in Table 1 until a combustion modification or change of location on or after January 1, 2012.
- (6) ~~New food ovens, f~~Fryers, ~~heated process tanks, parts washers, and evaporators~~ installed after December 5, 2008 and operating before January 1, 2014, are exempt from the emission limit in Table 1 until July 1 of the year the unit is 15 years old.
- (7) Remediation units are exempt from the applicable emission limit in Table 1 while fueled with propane, butane or liquefied petroleum gas in a location where natural gas is not available. Remediation units must comply with the emission limit when natural gas is available and while fueled with natural gas.
- (8) The provisions of paragraphs (c)(1) and (c)(3) of this rule shall not apply to any evaporator, heated process tank, or parts washer with a District permit issued and operating prior to January 1, 2014 until a combustion modification or the unit is replaced, relocated, or rebuilt.

(9) The provisions of paragraph (c)(3) of this rule shall not apply to units heated solely with infrared burners.

(10) The provisions of paragraphs (c)(1) and (c)(3) of this rule shall not apply to any unit that becomes subject to this rule subsequent to a revision of District Rule 219, on or after January 1, 2017, until a combustion modification or the unit is replaced, relocated, or rebuilt.

(h) Technology Assessment

(1) On or before December 7, 2015, the Executive Officer shall conduct a technology assessment and shall report to the Governing Board on the availability of burner systems and units for processes with NOx emissions of one pound per day or less.

(i) Mitigation Fee Compliance Option

(1) An owner or operator of a unit with emissions of ~~more than~~ 1 pound per day or more may elect to delay the applicable compliance date in Table 2 of paragraph (c)(1) or (c)(4) three years by submitting an alternate compliance plan and paying an emissions mitigation fee to the District in lieu of meeting the applicable NOx emission limit in Table 1.

(2) Compliance Demonstration

An owner or operator of a unit electing to comply with the mitigation fee compliance option shall:

(A) Submit an alternate compliance plan and pay the mitigation fee to the Executive Officer at least 150 days prior to the applicable compliance date in Table 2 of paragraph (c)(1) or (c)(4), and

(B) Maintain on-site a copy of verification of mitigation fee payment and ~~District AQMD~~ approval of the alternate compliance plan that shall be made available upon request to AQMD staff.

(3) Plan Submittal

The alternate compliance plan submitted pursuant to paragraphs (i)(1) and (i)(2) shall include:

(A) A completed ~~District AQMD~~ Form 400A with company name, ~~District AQMD~~ Facility ID, identification that application is for a compliance plan (section 7 of form), and identification that request is for the Rule 1147 mitigation fee compliance option (section 9 of form);

- (B) Attached documentation of unit fuel use for previous 5 years, description of weekly operating schedule, unit permit ID, unit heat rating (Btu/hour), and fee calculation;
- (C) Filing fee payment; and
- (D) Mitigation fee payment as calculated by Equation 1.

Equation 1:

$$MF = R \times (3 \text{ years}) \times (L_1 - L_0) \times (AF) \times (k)$$

Where,

MF = Mitigation fee, \$

R = Fee Rate = \$12.50 per pound (\$6.25 per pound for a small business with 10 or fewer employees and gross annual receipts of \$500,000 or less)

$L_1$  = Default NO<sub>x</sub> emission factor, 0.136 lbs of NO<sub>x</sub>/mmBtu for natural gas and LPG, and 0.160 lb/mmBtu for fuel oils

$L_0$  = Applicable NO<sub>x</sub> emission limit specified in Table 1 in lbs/mmBtu

AF = Annual average fuel usage of unit for previous 5 years, mmscf/yr for natural gas or gallons for liquid fuel

k = unit conversion for cubic feet of natural gas to Btu = 1,050 Btu/scf, 95,500 Btu/gallon for LPG, and 138,700 Btu/gallon for fuel oil

**APPENDIX B**

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**REFERENCES**

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## **APPENDIX C**

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## **REFERENCES**

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## **APPENDIX D**

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### **CEQA SOPING COMMENTS AND RESPONSES TO COMMENTS**

## **Introduction**

A CEQA scoping meeting was required for the proposed project pursuant to Public Resources Code § 21083.9(a)(2) and was held at the SCAQMD's Headquarters in conjunction with the Public Workshop on February 15, 2017. One CEQA related comment was received during the scoping meeting.

## **Comment #1**

(From Anthony Endres / Furnace Dynamics, Inc.) The response to question III a) in Chapter 2 of the NOP/IS concludes that the proposed project would not conflict with or obstruct and applicable air quality plan and as such would have a less than significant air quality impact. However, the responses to question III f) says the quantity of NOx emission reductions foregone that may occur as a result of implementing PAR 1147 are potentially significant. These two statements seem contradict to each other.

## **Response to Comment #1**

Question III. a) asks if the proposed project would “conflict with or obstruct implementation of the applicable air quality plan?”. While PAR 1147 will allow a higher NOx limit than what is currently allowed in Rule 1147, such that there will be NOx emission reductions foregone, PAR 1147 would not be expected to obstruct implementation of the 2012 AQMP Because one ton per day of NOx emissions were allocated in the SIP set aside account for every year starting in year 2013 to year 2030 in the event that NOx emission reductions were not achieved via rule adoptions or amendments, as is the case with PAR 1147. Further, this NOx set aside account was re-evaluated and revised in the 2016 AQMP based on expected growth and the number of projects expected to take place in near future years to two tons per day for every year starting in year 2017 to year 2025 and one ton per day for every year starting in year 2026 to year 2031. As a result, even though PAR 1147 would delay NOx emission reductions, the allocations in the set aside account combined with implementation of other control measures in the 2016 AQMP will achieve NOx emission reductions to offset the NOx emission reductions foregone from PAR 1147. Therefore, the conclusion of less than significant impacts for this question is appropriate.

Meanwhile, question III. f), asks if the proposed project would “diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)?”. Because the initial analysis of the potential effects of PAR 1147 indicated that the amount of NOx emission reductions foregone would exceed the SCAQMD's air quality significance threshold for NOx during operation, the response to this question correctly indicated that PAR 1147 would create potentially significant adverse air quality impacts. These impacts were further analyzed in the Chapter 4 of this Final SEA. The air quality analysis confirmed that the amount of NOx emission reductions foregone during operation will exceed the SCAQMD's operational air quality significance threshold for NOx starting in compliance year 2017 and beyond. Thus, the operational air quality impacts from implementing PAR 1147 are considered to be significant.

## **APPENDIX E**

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### **COMMENT LETTERS ON THE NOP/IS AND RESPONSES TO COMMENTS**

**Comment Letter #1: Gayle Totton / Native American Heritage Commission**

**Comment Letter #2: Diana Watson / Department of Transportation**

## Responses to Comments

### **Response to Comment Letter #1**

Thank you for your comment. SCAQMD is aware of the requirements of California Assembly Bill (AB 52) that went into effect on July 1, 2015. AB 52 is promulgated in Public Resources Code § 21080.3.1(d) and requires a formal notification to all California Native American Tribes about lead agency projects that would require the preparation of a CEQA document. In response to these requirements, SCAQMD revised its environmental checklist to contain significance criteria, and a discussion of Cultural Resources impacts in response to the requirements in AB 52 to specifically consider the proposed project's potential effects on Cultural Native American Tribe resources.

A discussion of impacts from PAR 1147 relative to tribal cultural resources was included in the NOP/IS (see pages 2-19 to 2-20). As explained in the NOP/IS, since PAR 1147 only applies to reducing NO<sub>x</sub> emissions by imposing NO<sub>x</sub> emission limits on existing gaseous or liquid fuel fired combustion equipment (ovens, dryers, dehydrators, heaters, kilns, calciners, furnaces, crematories, incinerators, heated pots, cookers, roasters, fryers, closed and open heated tanks and evaporators, distillation units, afterburners, degassing units, vapor incinerators, catalytic or thermal oxidizers, soil and water remediation units), no construction activities will be required and as such, no land will be disturbed. Therefore, no significant impacts on tribal cultural resources were identified.

The Native American Heritage Commission (NAHC) has previously provided guidance to SCAQMD staff recommending that notifications to California Native American Tribes should occur at the same time the SCAQMD releases a CEQA document for public review and comment. The SCAQMD currently follows the State Clearinghouse (SCH) procedures for distributing all CEQA documents to reviewing agencies and the NAHC was specifically designated as a reviewing agency at the time the NOP/IS was released for public review and comment. In addition to following the SCH procedures for soliciting agency review of CEQA documents, SCAQMD staff also sent a copy of the NOP/IS to an interested party contact list, which included over 100 contacts for Native American Tribes. No comment letters from any contacts on the Native American Tribes list were received relative to the NOP/IS.

### **Responses to Comment Letter #2**

As explained in the NOP/IS, PAR 1147 will resolve current Rule 1147 NO<sub>x</sub> emissions compliance issues that have been raised by businesses. It is estimated that up to 3,900 existing facilities (4,900 to 5,650 out of 6,400 existing units) within SCAB will be affected by PAR 1147. PAR 1147 proposes to extend the compliance dates for small and low use equipment based on a longer equipment lifetime, change the emission limits for certain specific equipment to address technical feasibility of meeting a 30 ppm NO<sub>x</sub> limit, add a testing exemption, and clarify exemptions for certain equipment. Therefore, PAR 1147 is expected to result in NO<sub>x</sub> emission reductions foregone of up to 0.9 ton per day starting in 2017. However, while most of the NO<sub>x</sub> emission reductions foregone will be eventually recaptured because the existing units will be regularly replaced and upgraded over time, approximately 0.03 ton per day of the NO<sub>x</sub> emission reductions foregone will be permanent (see Table 4-3). PAR 1147 does not require construction of new buildings, new add-on controls, or relocation of existing facilities. Therefore, construction activities or physical changes to the existing facilities are not expected to occur.

Further, as explained in the traffic and transportation analysis in the NOP/IS (see pages 2-48 to 2-50), implementation of PAR 1147 would not have any impacts to transportation and traffic. Therefore, no traffic studies will be necessary if PAR 1147 is implemented and PAR 1147 is not expected to affect any State right of way.

## **APPENDIX F**

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### **COMMENT LETTERS RECEIVED ON THE DRAFT SEA AND RESPONSES TO COMMENTS**

**Comment Letter #1: Anthony Endres / Furnace Dynamics, Inc.**

**Comment Letter #2: Paul Engel**

## Comment Letter #1



**FURNACE DYNAMICS, INC.**

261 Euclid Ave.  
Long Beach, CA 90803  
562-433-3025

May 9, 2017

Ms. Barbara Radlein  
Program Supervisor, CEQA Special Projects  
South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765-4178

Dear Ms. Radlein,

We have reviewed the PAR 1147 CEQA document presented March 23, 2017 and have provided our comments below for your consideration. I hope these comments will be helpful in finalizing your final Environmental Assessment.

### Page 3-2 Table 3-1: “Typical Uncontrolled NOx Emissions”

The emission values are in most cases extremely flawed. We have seen no evidence that any of the values in the chart are accurate and directly applicable to Rule 1147 devices.

Since the mid-1990s we have pre-tested well over 500 devices of all types of equipment including a significant number of RECLAIM sources. This also included approximately 200 parallel testing of these same devices with source test companies. The chart states the “Metal Heat Treating” and “Metal Melting Furnace” categories have uncontrolled emissions from 150-210 ppm. This is only applicable to furnaces with recuperated air systems that preheats the combustion air typically from 600°F – 1200°F with the net effect of increasing flame temperature and thus NOx emissions. We know of only one preheated air system that fits this profile in the Rule 1147 realm. That furnace was used to reclaim sand which showed a pretest value of about 156 ppm. This facility is no longer in 1147. We feel the values of the other classifications on Table 3-1 are also vastly overstated.

In the last 3.5 years, we have conducted over 225 pretests on both high and low temperature devices. The temperature ranges go from ovens that run at 300°F – 800°F and high temperature devices that can operate up to 2200°F. The non-preheated air systems are typically less than 100 ppm for high temp furnaces in the above categories. For low temperature devices such as powder coat ovens and other low temperature devices that operate well less than 1200°F the values are usually significantly less than 100 ppm. The chart states these devices are 120 ppm NOx, which on average, is probably double the actuals.

1-1

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Thus, the concern is the values indicated in the baseline inventory are dramatically overstated for Rule 1147 devices. Therefore, the overall emission reductions are overstated pursuant to rule requirements. This concern has been stated in taskforce meetings. If staff has evidence to support these values stated in Table 3-1, we would like to have them presented to us and the regulated community. That information should include the number of devices tested, what temperatures, how the tests were conducted, by whom and what b-cat categories were included to substantiate the values presented in Table 3-1.

On page 4-6 it states that the emission inventory for PAR 1147 is the inventory used for the 2008 rule adoption. As indicated above, we feel the basis for the inventory is significantly overstated.

The issue regarding the impact of a less stringent rule profile is the accuracy of the 0.9 ton per day declaration. It should be understood that a significant number of small sources are not required to report emissions on the AER program due to the de minimus nature of the emissions profile.

Even at that, with the staff utilizing a default emission factor of 130#/MMcf (101.4 ppm), the actuals are overstated.

We believe, other less than 1#/day devices would also fall into the same category of minimal emissions profile. And, as stated above there is no records of emissions due to the established criteria for inclusion of NOx data in the AERs.

On a study of the auto body industry that included 35 companies and 56 booths, with a total of 844 months of invoices evaluated the average was 0.125 #/day. The maximum input in the group was 1.2 MMBTU/hr and average was 751,516 BTU/hr.

By using this average and using PTE, the daily NOx values would be:

$$751,516 \text{ BTU/hr} / 1050 = 715.73 \text{ cf/hr}$$

$$715.73 \times 24 = 17,177 \text{ cf/day} / 1,000,000 = 0.017 \text{ MMcf} \times 130 = 2.233 \text{ #/day}$$

Thus, by comparing the PTE of 2.233#/day to the actual average of .125#/day, the actual is only 5.6% of PTE.

The document states there are significant number of devices >1#/day. If the analysis conducted, was based on the default emission factor of 101.4 ppm and PTE, many of the devices originally thought to be >1#/day would probably fall well under 1 pound per day.

Please review the summary of multiple types of companies PTE vs. actual gas consumption included in this writeup.

1-1  
cont.

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It is important to note that this information is available, in most cases, from the Districts AER (Annual Emission Report). We should compare the maximum input of each permitted device in the respective plants relative to PTE. In my evaluation “Percent of PTE – Multiple Facilities” the study included AERs for many clients. Some of these clients had Rule 219 equipment. I included the 219 equipment in the total maximum input calculations. Many others, emissions are so low that they are not required to report emissions. The values also include permitted and non-permitted equipment and were based on So. California Gas Company invoices.

1-1  
cont.

On page 4-10 ***Relationship Between Short Term Uses and Long Term Productivity***

A statement indicates that NOx is a precursor to ozone and PM2.5. Please refer to *Final PM2.5 Calculation Methodology, October 2006*, Table 3, page 5 which states (for external combustion sources) that 99% of PM10 is actually PM2.5. Therefore, the only way to reduce the amount of PM2.5 is to shutdown equipment or become significantly more efficient. Based on our review of the low NOx technology there are decreases in efficiency, due to the higher use of excess air to reduce the hot mix temperatures and thus lower NOx. There are some increases in efficiency due to improved control. We have seen no substantive evidence that there is an imbalance in loss vs. increase of efficiency in the application of low NOx burners to 1147 devices. Therefore, since the PM10 (PM2.5) is related to gas use not NOx emission profiles, rule 1147 emission reduction requirements’ will not have any substantive effect on PM2.5.

1-2

**Evaluation of Alternatives:**

Issues which are of the alternatives represent a balance of emissions reduction and have a major impact on the regulated community.

**Issues of BACT**

1. The current BACT requirements exempt the requirement for installing BACT equipment if the device emits less than 1 pound per day NOx. Thus, the extended compliance on alternative 4 maintains the requirements for BACT when the unit or burner is replaced. As long as the less than a pound per day is maintained; we believe this alternative would be the best solution.

1-3

**Issues of Cost Effectiveness**

1. The other item not discussed but eminently important is the issue of cost effectiveness. We have conducted many cost effectiveness analysis of devices using the Minor Source Cost Effectiveness formula. In the sources that are less than 1 pound per day the cost effectiveness values in many if not most cases far exceed \$100,000/controlled ton of reduction. A number of examples exceed \$1,000,000/ct. As an example, to put this in prospective, large RECLAIM

1-4

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power plant NOx reductions show cost effectiveness values of about \$3,000/ct. Aside from the BACT issue at less than 1 pound per day limitation, the small devices (small companies) have an economic burden that far exceeds the large utilities and refineries. These utilities have millions of customers and thus any costs are spread over these customers – making the incremental cost to them extremely small. Small companies have few customers by comparison and the cost effectiveness is a significant burden on their profitability and ability to stay in business as well as the ability to have their businesses in California.

1-4  
cont.

**Table 5-2**

**Alternative Proposed Project, B, C and D** all have the same forgone emissions of 0.9 tons/day – thus from an emission standpoint there are no differences. However, as we have previously stated the 0.9 t/d value may be overstated, thus the alternatives will have less impacts that the document defines.

1-5

**Alternative B, C and D** all have the same air quality impacts relating to the 0.9 tons per day, however, Alternative D indicates no recovery of emissions in the future. Since the proposed rule requires that if there is a replacement of the burner or device, compliance will be required. Thus, at some time the emissions will be reduced. However, these are mostly related to the <1#/day threshold, therefore, since they are not required to be BACT due to the limited emissions, the recovery is a moot point. As stated in the document, many of these are probably at 0.3#/day. Since the 0.3# value is based on the default emission factor of 101.4 ppm, it could be said, the actual emission reduction from retrofitting would be minimal at best. Bear in mind that if the requirement is 20 years or 25 years, since they are less than 1#/day, they are not and would not be required to retrofit the device.

1-6

**BACT Issues:**

Since **Alternative 4** exempts pressure washers due to the excessive cost and difficulty to retrofit (in some cases over \$200,000) and there are a very limited number of these in the SCAB, the impact of exemption is marginal at best.

**Alternative 4** also requires adequate recordkeeping, this is completely acceptable as an alternative measure. If the 1#/day is exceeded, retrofit is required whenever it occurs.

1-7

Amalgamation of **Alternative C and D** appears to be the best solution with minimal impact to the environment.

**Conclusion:** Since we believe the forgone emissions of 0.9 t/d are significantly above the actual emissions on a wide variety of devices, Alternative C and D offer the best solution, without

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placing a significant economic burden on industry in the future years. An additional consideration, since the RECLAIM program is being phased out, the emission reductions accrued the reinstallation of command and control rules from the large emitters will more than offset the estimated forgone emission from the proposed rule and Alternatives.

1-7  
cont.

It is highly problematic that staff chooses to use PTE to determine the emissions profile of the grouping of 1147 devices. The net effect is to overstate the emissions as a group and thus overstate the forgone emissions – without conducting an in-depth analysis of the actual emissions of these facilities. Additionally, the staff chooses to use the default emission factor of 130#/MMcf natural gas (101.4 ppm) to quantify the emissions profile regardless of type of equipment

**PAR Rule 1147:** The following comments relate to the proposed PAR 1147 rule language. A revised version dated May 2, 2017. We will provide staff with comments relating to those revisions.

1-8

1147(b)(9) Infrared burners since these burners are exempted by 1153.1 (without qualification) they should be exempted from 1147

Page 1 – 1147(b)(4) Recommend the wording be changed to change of location something to the effect that “No modification is required to an existing unit, if the equipment is the same as was permitted and operated at a previous location, provided no modification to the equipment has been made that would change rated input BTU capacity or emissions profile.”

1-9

Page 4 – 1147(c)(1)(A) The word “relocated” should be removed. If a unit is less than 1 pound per day and maintains documentation substantiating the classification – a 30-year limitation should not be applied. The rule does require the permit holder to provide annual maintenance to the equipment.

1-10

**Table 1:**

Add *Multi chambered* to the dual chamber. For example, a heat set lithography press, three heat set presses exhaust all go into an afterburner, therefore the multi chamber definition would apply.

1-11

1147(c)(6) eliminate 35 years – since these less than 1#/day devices are not required to comply with BACT and keep records, they should not have to retrofit in the future. The rule requires annual maintenance records therefore, if properly maintained, they should remain less than 1 pound per day. Also, consider since many of these are well less than 0.5 pounds per day, the future cost would be astronomical in a cost per controlled ton basis.

1-12

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- |  |   |      |
|--|---|------|
| 1147(c)(6)(C) Read timers once per month.  | ] | 1-13 |
| 1147(c)(6)(C) change "calibrated" to only the fuel meter not a non-resettable timer.   | ] | 1-14 |
| 1147(c)(6)(C) Remove the less than 22 pounds per month and reinstate the 30#/month.  | ] | 1-15 |
| 1147(c)(6)(C) Revise the timer to 50% of maximum input not maximum input. No devices in 1147 operate at 100% capacity. No device operates at PTE since all devices are controlled by a temperature controller with specific set points for a given process. See writeup on PTE and refer to the dialogue on the CEQA document relating to actual vs PTE. | ] | 1-16 |
| Table 3 See the included chart relating to the emission factors calculated based on hour considerations for the specific input values.   | ] | 1-17 |
| Table 4 See chart to correct the hours per month that should be allowed for the specific input values.   | ] | 1-18 |
| (c)(6)(F) Note the value of 7,692 cf/day is based on the default emission factor of 130#/MMcf or 101.4 ppm. The Table 3 and 4 are not based on 101.4 ppm but higher values. This is inconsistent.  | ] | 1-19 |
| (d)(7) identifies units with one dual purpose burner that both heats and incinerates VOC, toxics or PM demonstrates compliance with the following.   | ] | 1-20 |
| (d)(7)(A) If there is only one burner the only place to test is the emission stream exiting the device, thus only one test is required.  | ] | 1-21 |
| (d)(7)(B) This is no longer valid due to the change in Table 1.  | ] | 1-22 |
| (f)(1) Remove repair, if a system is repaired to the same configuration as the original burner, no emission changes are present. Also, remove the change of location from the revision.  | ] | 1-23 |
| (f)(4) Remove the reference to 30 years. If the unit is <1#/day and is maintained per rule requirements, there is no need to replace it in 30 years since it will still be less than one pound per day.  | ] | 1-24 |

Should you have any questions feel free to call me any time.

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***FURNACE DYNAMICS, INC.***

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Sincerely,

Anthony W. Endres  
President

Enc.

cc. Dr. Philip Fine  
Mr. Tracy Goss  
Mr. Gary Quinn  
Mr. Wayne Barcikowski

This page is an attachment and referenced in Comment #1-1 of this letter.

## Percent of PTE - Multiple Facilities Rule 1147 Companies

Type	Duration Years	Percent of PTE
Medium Forge	1	10.8%
Medium Forge	1	19.6%
Heat Treat	1	16.7%
Powder Coat	6	14.9%
Powder Coat	1	12.0%
Furniture Mfg	2	13.9%
Autobody Study	multiple	5.6%
	<b>Average</b>	<b>13.4%</b>

Notes:

1. The maximum of all devices were added for a total input
2. The input was converted to cubic feet x 24 x 365
3. The gas consumption was based on Gas Co invoices
4. The percentage is based on PTE vs. Actual Consumption
5. Autobody study included 56 booths, 844 months of Gas Co. invoices



This page is an attachment and referenced in Comment #1-16 of this letter.



*Furnace dynamics, inc.*

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November 19, 2015

**A discussion on Potential to Emit (PTE)**

Potential to Emit is defined as the maximum amount of emissions that can be generated from a device operating at maximum capacity, 100% all of the time, twenty-four hours per day, seven days a week. On an annualized basis that number would be multiplied by 365 days per year. Whereas this is a relatively simplistic approach to determining emissions, it actually is impossible for devices to operate under these conditions. They can only operate under these conditions for relative short intervals when the equipment is first fired. The reason has to do with the fact that all of the devices in Rule 1147 are based on a defined operating temperature. This is true from forging, heat treating, metal melting, powder coating, crematories, cooking ovens, etc.

For example, I have designed combustion systems for over 120 furnaces in forging, heat treating and metal melting. Categorically, no device design is based on PTE. They are based on the objective for the process; the production throughput, operating temperatures, refractory losses, etc. It boils down to the net available heat to do work in the furnace or oven, after combustion losses balanced with the production of a given product.

On direct fired forge furnaces, the typical operating temperature range can be anywhere from 800F to as high as 2250°F and they can be in the same furnace. The theoretical flame temperature under optimal air fuel ratio conditions is between 3000°F and 3100°F. To put this into perspective, carbon steel in a molten state is cast at temperatures around 2900°F to 3050°F. Thus if operated in a typical high temperature furnace you could melt metal. Since the operating temperatures are dramatically less, the firing rate overall is consequently less. Since different alloys require tight control on operating temperatures, the heat input must be precisely maintained to not metallurgical destroy the parts contained in the furnaces. For instance, titanium is finish forged at 1750°F. If the temperature goes to 1825°F, the parts are scrap. It can thus be seen that it is impossible to operate at PTE without destroying parts. This goes for any operating range.

This is true regardless of the process albeit, in the metals industry, powder coating, burn off and a plethora of other processes covered in Rule 1147. They all provide heat input to match a specific set point temperature that are required to maintain the product quality necessary to satisfy customer needs. When looking at powder coating, the low NOx burners provide an operating temperature of between 300°F and 650°F, particular powder materials require tight temperature control. If that temperature is exceeded, the powder will be burnt, rendering the parts unusable. Due to the nature of oven burners and the necessity to achieve 30 ppm, the burners typically operate at higher amounts of excess air than high temperature operations. Even

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so, the actual flame temperatures can reach over 2000°F. Again, the PTE value would be incorrect to apply as a determinate consideration of emissions and thus pound per day emission profiles.

**Actual Annual Use vs. PTE:** To make the determination of actual vs. PTE, we acquired So. Cal Gas Company annual use in therms, converted them to millions of cubic feet, then got to total BTU/hr maximum input of each device in the plant and correlated the actual MMcf to the potential if operated at the maximum input, 24 hours per day on an annual basis. I conducted a study to determine the correlation of PTE to actual usage on two forge plants, one very large and a medium small shop. By the above method, the large forge facility was operating at a 25% of PTE. On the smaller facility there were gas consumption limits on all of their furnaces. The actuals were 19.6% of the permit limits which was well below the devices PTE. This facility was evaluated for actual annual vs. PTE and the results showed 10.82%. I have just completed an evaluation of a couple of powder coating companies. One had an actual annual, compared to PTE of 12%. Another powder coat facility showed a six-year average of 10.49%. during the six years the annual averages ranged from 9.16% to 11.99%. It is important to understand that these facilities were operating under normal production capabilities. Some companies are single shift, others are two shift and one is a three shift operation 5 days per week. I will be conducting additional analysis on a number of other facilities and forwarding those values to staff. However, I would believe the Actual compared to PTE is going to be in the 10% - 25% range.

**Included Charts:** I have included a series of charts that can provide a level of understanding of the relationship of daily emissions vs. BTU input vs. hours of operation at a variety of different average firing rates. The first charts are related to the SCAQMD default emission factor of 130#/MMcf natural gas or 101.4 ppm. The first chart shows the correlation of values assuming 100% of the capacity of the combustion system or PTE. The next three charts show the same correlations of firing rate to hours of operation at 50% of PTE and 20% of PTE. The fourth chart shows how high the BTU rating could be per hour of operation and still stay under 1#/day of NOx. The last three charts show the same data but based on a lower emission value of 60 ppm.

It can be seen the lower emission values reflect a substantially lower pound per day emission value. This is for illustrative value only. However, it should be understood that few devices operate anywhere near the default ppm values. In the last 3 years I have conducted approximately 175 pretests (mostly on 1147 devices) using a Testo 350 combustion analyzer. I have also parallel tested about 70 official source tests and my readings are typically less than 2 ppm deviation from the official source test results. I have yet to see any device that operated near the 101.4 ppm level. The lower temperature devices such as ovens are even lower relative to the default emission factor. Thus even with the values shown on the first 4 charts, the pound per day values are overstated.

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I believe a collaborative effort on behalf of District staff and industry representatives can arrive at a reasonable means of determining what constitutes one pound per day usage. Perhaps the simplest approach could be the use of non-resettable timers on devices, with a limit of X hours per day for a given BTU input. Obviously this would have to be backed up with logs of hours of operation that could be verified by an inspector. If, as was suggested in the 1147 Task Force Meeting, an exemption (or an extended compliance date) be given to devices operating at less than a pound per day, verification is essential. There could be other means of quantification of daily emissions – these need to be discussed in a meaningful way to determine what works for the District and industry.

As always, we appreciate the opportunity to work with staff to assist in developing a bridge of understanding of how industry actually operates. Should you have any questions regarding this subject, please feel free to engage me in a meaningful dialogue to assist in developing rules that relate to real-world conditions.

Sincerely,

Anthony Endres  
President

This page is an attachment and referenced in Comments #1-17, 1-18 and 1-19 of this letter.

## Review of PAR 1147 Table 3 and 4

**Table 3 - Small and Low Use Unit Daily Operating Limits**

### Converting to Actual ppm NO<sub>x</sub>

BTU/hr	Hours/day	#/day	Actual ppm
325,000 - 400,000	16	0.792	127.97
400,001 - 500,000	14	0.867	117.00
501,000 - 800,000	8	0.792	127.97
800,001 - 1,000,000	6	0.743	136.50
1,000,001 - 1,200,000	5	0.743	136.50

Notes:

1. "#/day" is based on 101.4 ppm (130#/MMcf)
2. "Actual ppm" correlates #/day vs. hours converted back to ppm
3. The highest value was used for actual ppm

**Table 4 - Small and Low Use Unit Monthly Operating Limits**

### Converting to Proper Monthly Hourly Limit

BTU/hr	PAR 1147 Hours/Month	#/month	Hr/mo = 29.96#/mo	#/mo
325,000 - 400,000	352	17.43	605	29.96
400,001 - 500,000	308	19.07	484	29.96
501,000 - 800,000	176	17.43	302	29.96
800,001 - 1,000,000	132	16.34	242	29.96
1,000,001 - 1,200,000	110	16.34	202	29.96

Notes:

1. Cubic feet per day natural gas = 7,682
2. Hr/mo = 29.96 #/mo is based on 1050 BTU/cf and 130#/MMcf
3. The highest value was used for actual ppm

Comment Letter #2

From: Paul Engel <paulkengel@gmail.com>  
Sent: Thursday, May 11, 2017 12:10 PM  
To: Barbara Radlein  
Cc: Anthony Endres; Gerry Bonetto  
Subject: Proposed Amendment Rule 1147

Barbara

I was in receipt of Mr Endres' comments to CEQA document and proposed Rule 1147. I have been involved with permitting and compliance consulting since 1988. I find that Mr. Endres' comments reflects more correctly actual operations of combustion equipment versus theoretical rated design values. I have worked and continue to work with printers with natural gas-fired dryers for heat-set web-fed printers within AQMD jurisdiction. PTE is an intellectual value with minimal reflection on actual operations. The rated heat input is only experienced for cold start-up to get the oven to operating conditions quickly. If the printers operated at the rated maximum heat inputs, the printed product would be unusable because the printed product would be damaged because of curdled or blistered substrate or in fact would likely cause press fires.

2-1

Thank you for considering the revisions to Rule 1147.

Paul Engel

714-473-8036

## **Responses to Comments**

### **Responses to Comment Letter #1**

#### **Response 1-1**

The baseline emissions shown in Table 3-1 of the Draft SEA are not based on the emission factors listed in the table. Table 3-1 originates from the Environmental Assessment (EA) for Rule 1147 adoption in December 2008 (referred to herein as the December 2008 Final EA). The information contained in the December 2008 Final EA, including Table 3-1, was relied upon and is necessary to complete the analysis in this SEA. The total emissions presented in Table 3-1 is originally from the 2007 Air Quality Management Plan and are based on information generated by local gas utilities which in turn were provided to the California Public Utilities Commission and Energy Commission. This information was then provided to the California Air Resources Board (ARB) who, along with SCAQMD inventory data, relied upon this information to prepare an emission inventory. The emission factors listed in Table 3-1 are from U.S. EPA and were presented in the table only to illustrate the range of emissions from these types of equipment. The emission estimates for the different categories were prorated based on the estimate of the number of equipment in each category. This information was previously communicated to the commenter and other stakeholders during rule development for the December 2008 adoption of Rule 1147 and later during the September 2011 amendments to Rule 1147.

The commenter states that there are only a few units with emissions greater than one pound per day. SCAQMD staff agree that most equipment affected by Rule 1147 would have emissions less than one pound per day. As described in the Staff Report for PAR 1147, at least 75 percent of the affected units have emissions less than one pound per day and that number could be as high as 90 percent. However, as a group, these units generate a significant amount of emissions. Consequently, emission reductions are needed to achieve compliance with the ambient air quality standards for ozone and NOx.

While it is true there are other sources information of emissions including the SCAQMD annual emission reporting, it is not always possible to use these other sources. As noted by the commenter, few businesses are required to report under the SCAQMD's Annual Emissions Reporting program. In addition, most of the information collected is aggregated and it is not possible to identify individual equipment fuel use and emissions. The analysis for any rule development project estimates average and range of emissions based on appropriate emission factors that represent average emissions from different categories of equipment as well as estimates of hours of operation and usage. Some equipment will have lower emissions but other equipment will have above average emissions. Both the Staff Report and SEA for PAR 1147 do not use potential to emit (PTE) to estimate emissions. However, this information can be adjusted to estimate actual emissions and is available for many equipment.

Because the fuel usage, emission factors or emission test results, and PTE as calculated for the SCAQMD permit were not provided by the commenter, it is not possible for SCAQMD staff to evaluate the table of emissions estimates that was provided in the attachment to this letter. In addition, the weekly, daily, and hourly operation schedules were not provided. Daily emission estimates from annual data can vary significantly depending upon the actual operating schedule

and other factors. For example, dividing annual emissions by 365 days per year when a unit operates 250 days per year or less can substantially underestimate the quantity of daily emissions. Staff has estimated that a typical spray automobile repair spray booth has NO<sub>x</sub> emissions less than 0.3 pound per day for an average one shift per day operation. However, some units process many more cars per day in one shift than others and some units are used for more than one shift per day. Emissions also vary depending upon the type of booth. In addition, new booths are more efficient, but there are many older booths in the SCAQMD which will have higher emissions.

The estimate of NO<sub>x</sub> emission reductions foregone for PAR 1147 is expected to range between 0.6 and 0.9 ton per day of NO<sub>x</sub> which will be made up over time as new units replace old units. For the impact analysis in this SEA, it is necessary to estimate the worst case impacts where there is uncertainty regarding the impacts of the proposed project and its alternatives. Thus, the worst case analysis for CEQA purposes relies on the 0.9 ton per day of NO<sub>x</sub> emission reductions foregone.

### **Response 1-2**

PM<sub>2.5</sub> is both directly emitted and chemically produced from its precursors which are nitrogen oxides, sulfuric oxides and volatile organic compounds. Research in atmospheric chemistry and EPA guidelines clearly define that NO<sub>x</sub> is a PM<sub>2.5</sub> precursor. PM<sub>2.5</sub> monitoring and modeling is required to be chemical specific (EPA, 2014) for demonstration of attainment in the AQMP and State Implementation Plan (SIP)<sup>6</sup>. The chemical components defined include nitrate, sulfate, organic carbon, elemental carbon, ammonia, crustal components, salt, and others. In the South Coast Air Basin, the majority of ambient PM<sub>2.5</sub> are produced by chemical reactions from NO<sub>x</sub>, SO<sub>x</sub> and reactive organic materials. Reductions in NO<sub>x</sub> emissions from any source result in reductions of PM<sub>2.5</sub> ambient concentrations.

### **Response 1-3**

The commenter refers to Alternative 4 in the letter, but the Draft SEA identifies the alternatives as Alternative A, B, C and D. Alternative D is the alternative that would allow compliance with the NO<sub>x</sub> limit provided that records can demonstrate that emissions would be less than one pound per day. However, the option to allow for the demonstration that emissions would be less than one pound per day is only one component of Alternative D. When taking into account all of the other components that comprise Alternative D, the overall impacts when compared to the proposed project is that Alternative D would be the least stringent alternative and would not be equivalent to BACT.

### **Response 1-4**

Cost-effectiveness is addressed in the Staff Report and Socioeconomic Analysis, but not in the Draft SEA. The analysis shows that PAR 1147 would be less costly than the existing rule. It should be noted that stakeholders agreed that the Technology Assessment's cost and cost-effectiveness analysis for small units (< 1 lb/day) should result in exemptions and compliance delays.

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<sup>6</sup> U.S. EPA, 2014, Draft Modeling Guidance for Demonstrating Attainment of Air Quality Goals for Ozone, PM<sub>2.5</sub>, and Regional Haze.

Stakeholder input on cost for larger units (> 1 lb/day) was at times consistent with staff's estimates when sufficient detail was provided by the stakeholder. However, comments with examples of cost-effectiveness that were significantly higher could not be verified by SCAQMD staff. In these instances, the basis and details of costs provided by stakeholders were not transparent and staff along with the independent reviewer of the Rule 1147 Technology Assessment were not able to complete evaluation of the information provided. The cost-effectiveness analyses provided by stakeholders were not always consistent with permitted equipment operating hours, permit requirements, and recommendations from the ABT review of the SCAQMD cost analyses (i.e., a 2014 third party review of SCAQMD cost analyses). In addition, rebates from utilities for rebuilt units were excluded from cost information provided by stakeholders.

#### **Response 1-5**

While it may appear that because the NOx emission reductions foregone will be 0.9 ton per day for Alternatives B, C, and D, the quantity of emission reductions foregone is not the only metric that separates the alternative's characteristics from each other. These three alternatives vary by whether the NOx emission reductions foregone will be all temporary, all permanent, or a combination thereof, and these effects are dependent upon the varying equipment category components. Further, the timing of when NOx emission reductions foregone will occur, and when any of the emission reductions will be recovered also vary amongst these three alternatives.

For example, unlike the proposed project and Alternative C, Alternative B does not exempt any units less than 325,000 BTU/hour from any limit. Further, Alternative B has a 25-year compliance schedule which is shorter than the 30-year compliance schedule in the proposed project. Also, Alternative B does not have any permanent emission reductions foregone and the 0.9 ton per day of the emission reductions foregone are expected to be fully recovered. Both Alternative C and D have no age requirement and provide additional exemptions for all pressure washers, and therefore both Alternative C and D will have more permanent emission reductions foregone comparing to the proposed project.

Thus, contrary to the comment, these differences, while they may seem subtle, define the characteristics of Alternative B, C, and D and do not overstate the impacts that may occur if any are implemented.

#### **Response 1-6**

As explained in Response 1-5, Alternatives B, C and D do not have the same air quality impacts as demonstrated in Table 5-2 of this Final SEA. See Response 1-5.

#### **Response 1-7**

The overall impacts to the environment from implementing Alternatives C and D is explained in Response 1-5. It is important to note that of the total 0.9 ton per day of NOx emission reductions foregone, the portion that can be attributed to pressure washers under Alternatives C and D is approximately 36 pounds per day of NOx emission reductions foregone, which SCAQMD staff believes is not a "marginal" amount (see Table 5-3).

**Response 1-8**

Units fired solely with direct fired infrared burners are exempt from the emission testing requirement if certain operating parameters are met. This requirement was added to PAR 1147 to be consistent with SCAQMD Rule 1153.1 – Emissions of Oxides of Nitrogen From Commercial Food Ovens.

**Response 1-9**

SCAQMD staff believes that the current definition of relocation in PAR 1147 accurately describes the actions associated with relocating equipment and is consistent with other SCAQMD rules.

**Response 1-10**

An equipment life of 30 years provides sufficient time for most units to be replaced. If an owner chooses to modify a very old unit to comply with the rule emission limit, the owner has that option. Thirty years is beyond the time an owner would have loan payments for a unit and the time a unit can be depreciated for tax purposes. Compared with new equipment, after 10 years of use, most units require major maintenance in order to continue operation. If an owner chooses to buy used equipment, to install in a facility, then that old unit should meet the same emission limit as a new unit. This approach is consistent with federal, state, and SCAQMD's New Source Review requirements per Regulation XIII which is applicable to relocating units. In addition, units with emissions of one pound per day or more must comply with BACT upon relocation.

**Response 1-11**

Staff has modified Table 1 in PAR 1147 to address the concern raised in this comment.

**Response 1-12**

This issues raised in this comment repeat the sentiments expressed in Comments 1-4 and 1-10. Please see Responses 1-4 and 1-10.

**Response 1-13**

Business owners have that option in the both the current version of Rule 1147 and in PAR 1147 to read the timers monthly, but they may also choose to document the meter readings on a daily basis.

**Response 1-14**

PAR 1147 has been crafted to be consistent with other requirements contained in other SCAQMD rules, policies, and standard permit conditions. Please also see Response 1-13.

**Response 1-15**

PAR 1147 has been crafted to be consistent with other requirements contained in other SCAQMD rules, policies, and standard permit conditions. Please also see Response 1-13.

**Response 1-16**

The screening tables in PAR 1147 are one way to document NOx emissions of less than one pound per day. However, many other options are available. In addition, there are many units that operate at 100 percent because the burners turn on at 100 percent of the firing rate and then turn off when the temperature set point is reached. For these units, the screening tables are the simplest method to document emissions. The hours in Tables 3 and 4 of PAR 1147 are based on the emission

factors referenced by the commenter but are slightly less than the hours from those calculations. The emission factor referenced is an average and some equipment will have higher emissions. The tables also include a safety factor so that equipment owners know when they should consider using another more accurate method to document emissions of less than one pound per day.

**Response 1-17**

This issues raised in this comment are addressed in Response 1-16.

**Response 1-18**

This issues raised in this comment are addressed in Response 1-16.

**Response 1-19**

This issues raised in this comment are addressed in Response 1-16.

**Response 1-20**

The paragraph in PAR 1147 that is referenced by the commenter is incorrect. However, consistent with other changes in PAR 1147 for incineration type devices, PAR 1147 no longer identifies dual purpose burners as a two-function device with a different emission limit when performing emission testing. This change to PAR 1147 address the recommendations in Comments 1-20 through 1-22.

**Response 1-21**

The paragraph in PAR 1147 that is referenced by the commenter is incorrect. However, consistent with other changes in PAR 1147 for incineration type devices, PAR 1147 no longer identifies dual purpose burners as a two-function device with a different emission limit when performing emission testing. This change to PAR 1147 address the recommendations in Comments 1-20 through 1-22.

**Response 1-22**

The paragraph in PAR 1147 that is referenced by the commenter is incorrect. However, consistent with other changes in PAR 1147 for incineration type devices, PAR 1147 no longer identifies dual purpose burners as a two-function device with a different emission limit when performing emission testing. This change to PAR 1147 address the recommendations in Comments 1-20 through 1-22.

**Response 1-23**

Paragraph (f)(1) of PAR 1147 identifies documents that must be made available to the SCAQMD in order to determine if a modification is a repair, a change in burner output, or a burner replacement. Rule 1147 requires maintenance records to be kept by the owner at the facility location.

**Response 1-24**

Contrary to the comment, there is no age requirement in paragraph (f)(4) of PAR 1147. See Response 1-10 for a discussion on the age requirement that is contained in PAR 1147.



**Response to Comment Letter #2**

**Response 2-1**

Thank you for your comment. The issues raised in this comment letter repeat the sentiments expressed in Comment Letter #1. Please refer to Responses 1-1 through 1-24.

# PROPOSED AMENDED RULE 1147 – NO<sub>x</sub> REDUCTIONS FROM MISCELLANEOUS SOURCES



June 2, 2017

Governing Board Meeting

# Rule 1147 Background

- Rule 1147 was adopted December 2008
- Proposed amendments reflect findings from Rule 1147 Technology Assessment which considered availability of low-NOx burner systems for small and low emissions sources (< 1 pound/day)
- Proposed amendments provide regulatory relief for over 5,000 small combustion units from compliance limits that become effective

**7/1/2017**

# Regulatory Relief for Small NOx Sources

## Low-Emitting Combustion Units ( $< 1$ Pound per Day)

- Removed in-use requirement
- Must meet emission limit when unit or burner is replaced
- Extend replacement time from 20 to 30 years

## Low Use Combustion Units ( $< 325,000$ BTU/Hr)

- Removed NOx emission limit for units  $< 325,000$  BTU/hour
- No longer required to meet new or in-use NOx emission limit

# Recognizes Technology Limitations for Specific Applications

## NOx Limit for Certain Equipment Categories

- Increased NOx limit from 30 to 60 ppm for:
  - Afterburners
  - Incinerators, and
  - Burn-off ovens
- Changes consistent with Technology Assessment

## Pressure Washers and Tanks

- Exempt existing in-use pressure washers and tanks
- Not technically feasible to directly retrofit these equipment, therefore not cost-effective

## Infrared burners

- Testing exemption for infrared burners

# Compliance Flexibility

## Alternative Compliance Demonstration

- Provides alternative paths to demonstrate compliance  $< 1$  lb/day such as fuel use or burner hours of operation

## Vendor Warranty Option

- Small unit option to use vendor warranty in lieu of certification or source testing (Units  $< 2$  mm Btu/hour)

## Testing Options

- Additional testing option for low temperature ovens

# Emissions Reductions

- Overall delay in emission reductions of about 0.9 tons per day NO<sub>x</sub> (removing in-use requirement for units < 1 pound/day)
  - Affecting approximately 4,900 to 5,600 pieces of equipment
- Emission reductions foregone is < 0.03 tons per day NO<sub>x</sub> associated with <325,000 btu/hr units

# Outreach

- Stakeholders have requested staff provide compliance assistance to avoid confusion
  - particularly by smaller facilities
  - including available burner options
- Staff has agreed to work with stakeholders
  - Resolution commitment
- Staff has already initiated first meeting with key stakeholders to develop a two-phase approach

## Rule 1147 Compliance Guide

*A Simple Guide to  
Ensure You Know How to Stay in  
Compliance with Rule 1147*





# Recommendation

- Adopt the Resolution:
  - ▣ Certifying the Final Subsequent Environmental Assessment;
  - ▣ Amending Rule 1147; and
  - ▣ Directing staff to work with stakeholders to conduct outreach to help guide facilities through the applicable rule requirements

BOARD MEETING DATE: June 2, 2017

AGENDA NO. 30

**PROPOSAL:** Certify Nonattainment New Source Review Compliance Demonstration for 2008 Ozone Standard

**SYNOPSIS:** The District has an existing federally-approved nonattainment New Source Review (NSR) program that covers the South Coast Air Basin and Coachella Valley, which are designated extreme and severe-15 nonattainment, respectively. The District program, which applies to new major stationary sources and major modifications to existing major sources, is at least as stringent as the requirements set forth by the U.S. Environmental Protection Agency (U.S. EPA). States must submit a nonattainment NSR plan or plan revision for the 2008 ozone standard certifying that the current SIP-approved nonattainment NSR program meets the requirements for the implementation of the 2008 ozone NAAQS. This action is to seek Board certification of the nonattainment NSR compliance demonstration for submittal to CARB for its approval and to submit to U.S. EPA for inclusion in the SIP.

**COMMITTEE:** Stationary Source, May 19, 2017, Reviewed

**RECOMMENDED ACTIONS:**

Adopt the attached Resolution:

1. Certifying the Nonattainment NSR Compliance Demonstration for the 2008 Ozone Standard; and
2. Directing the Executive Officer to submit the Nonattainment NSR Compliance Demonstration for the 2008 Ozone Standard to CARB for its approval and subsequent submittal to the U.S. EPA.

Wayne Nastri  
Executive Officer

## **Background**

Effective July 20, 2012, the U.S. EPA designated areas throughout the country as nonattainment for the 2008 Ozone National Ambient Air Quality Standards (NAAQS) and established classifications for the designated nonattainment areas. The South Coast Air Basin (Basin) was classified as “extreme” nonattainment and the Coachella Valley, located in Riverside County, was classified as “severe-15” nonattainment for the 2008 8-hour Ozone NAAQS.

Nonattainment NSR is a preconstruction review permit program that applies to new major stationary sources or major modifications at existing major sources located in a nonattainment area. The Clean Air Act (CAA) requires that areas classified as moderate nonattainment or higher must demonstrate emissions offsets for new or modified major stationary sources under the state’s nonattainment NSR program. Requirements are more stringent for each higher ozone nonattainment classification. The nonattainment NSR requirements for the 2008 ozone standard, set forth in § 182(e)(1) and (2) of the CAA for extreme nonattainment areas and § 182(d)(2) of the CAA for severe-15 nonattainment areas, have already been satisfied by the SCAQMD’s existing NSR rules as demonstrated in the attached Compliance Demonstration. The specific nonattainment NSR requirements for the 2008 ozone NAAQS are located in 40 CFR § 51.160–165. U.S. EPA’s rule entitled “Implementation of the 2008 NAAQS for Ozone State Implementation Plan Requirements,” 80 FR 12,264 (March 6, 2015) explained that, for each nonattainment area, a nonattainment NSR plan or plan revision was due no later than 36 months after the effective date of area designations for the 2008 standards (i.e., July 20, 2015). Based on prior experience, staff assumed that the existence of a U.S. EPA-approved NSR rule for extreme areas satisfied this requirement.

On February 3, 2017, in response to a lawsuit, the U.S. EPA found that 15 states and the District of Columbia failed to submit SIP submittals in a timely manner to satisfy various requirements of the 2008 8-hour Ozone NAAQS, including a nonattainment NSR SIP revision for the South Coast Air Basin and Coachella Valley.<sup>1,2</sup> Although the District has an existing federally-approved nonattainment NSR program that covers the South Coast Air Basin and Coachella Valley, and the 2016 AQMP provided an analysis to demonstrate compliance with nonattainment NSR requirements, U.S. EPA determined that the District needed to submit a SIP revision certifying that the current SIP-approved nonattainment NSR program meets the requirements for the implementation of the 2008 ozone NAAQS.

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<sup>1</sup> U.S. EPA also made findings of nonsubmittal, which have already been addressed. The clean fuels for boilers requirement for extreme nonattainment areas, set forth in § 182(e)(3) of the Clean Air Act (CAA), has already been satisfied by the SCAQMD’s Rule 1146, Rule 2002, and Rule 1303, which have been previously submitted as SIP revisions for the Basin. *See* 61 Fed. Reg. 57,775 (Nov. 8, 1996).

<sup>2</sup> Compliance with the VMT offset requirement, set forth in § 182(d)(1)(A) of the CAA, is demonstrated in Appendix VI-E of the 2016 AQMP for the Basin and in Chapter 7 (page 7-32 to 7-36) for Coachella Valley for the 2008 8-hour Ozone NAAQS.

If the U.S. EPA finds that a state has failed to make the required SIP submittal or that a submitted SIP is incomplete, then CAA § 179(a) establishes specific consequences including the imposition of mandatory sanctions for the affected area, within 18 months after the finding of nonsubmittal (August 2018 in this case).

The extreme nonattainment NSR requirements, set forth in § 182(e)(1) and (2) of the CAA, and the severe-15 nonattainment NSR requirements, set forth in § 182(d)(2) of the CAA, have already been satisfied by the SCAQMD's existing NSR rules, which have been approved by the U.S. EPA.<sup>3</sup> This action is to certify the attached Compliance Demonstration.

### **Proposal**

The extreme nonattainment NSR requirement, set forth in § 182(e)(1) and (2) of the CAA, requires that the offset ratio of total VOC emission reductions to total increased emissions of such air pollutant be at least 1.5 to 1. However, an exception exists when all existing major sources are subject to federal Best Available Control Technology (BACT), in which case the offset ratio should be at least 1.2 to 1. Modifications at major sources require an offset ratio of at least 1.3 to 1.

The severe nonattainment NSR requirement, set forth in § 182(d)(2) of the CAA, requires that the offset ratio of total VOC emission reductions to total increased emissions of such air pollutant shall be at least 1.3 to 1, except when all existing major sources are subject to BACT, in which case the offset ratio should be at least 1.2 to 1.

The SCAQMD's federally-approved NSR program covers the South Coast Air Basin and Coachella Valley, and both satisfy the more stringent extreme nonattainment area requirements except for the higher threshold for Lowest Achievable Emissions Rate (LAER) in severe areas, which is 25 tpy. Therefore, both areas are in compliance with nonattainment NSR requirements.

The SCAQMD's NSR rules were adopted in 1979, significantly amended in 1990 and in 1995, and were approved by U.S. EPA into the SIP in December 1996. U.S. EPA's approval concluded that the District's NSR program meets the requirements for extreme ozone areas. The SCAQMD rules require that any increase from a discrete unit be subject to LAER at major sources and state law BACT at minor sources. Rule 1303(a). With respect to offsets, unless exempt from offsets requirements pursuant to Rule 1304, emission increases shall be offset by either Emission Reduction Credits, or by allocations from the Priority Reserve, or allocations from the Offset Budget. Offset ratios shall be 1.2-to-1.0 for Emission Reduction Credits and 1.0-to-1.0 for allocations from the Priority Reserve. U.S. EPA's 1996 approval included the understanding that the SCAQMD would continue to implement a tracking system which will continuously

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<sup>3</sup> SCAQMD's NSR rules (Reg XIII) were approved by U.S. EPA into the SIP in December 1996. 61 Fed. Reg. 64,291. U.S. EPA's approval concluded that the District's NSR program meets the requirements for extreme ozone nonattainment areas. 61 Fed. Reg. at 64,292, *see also* 64 Fed. Reg. 13,514 (Mar. 19, 1999), 71 Fed. Reg. 35,157 (June 19, 2006).

show, in the aggregate, that the SCAQMD would meet the statutory offset ratios, and that the SCAQMD would mitigate emissions from those sources that are exempt from offsets under the SCAQMD's program but are not exempt under federal law. In accordance with the commitment to maintain a tracking system, the SCAQMD has submitted NSR equivalency reports covering the periods 1990-2014. SCAQMD's tracking system continues to show equivalency with federal offset requirements. Preliminary equivalency reports are presented to the Board each February, with final reports presented each September.

For RECLAIM sources subject to NSR, SCAQMD adopted RECLAIM regulations in 1993, which govern NOx and SOx emissions from RECLAIM sources. Rule 2005 implements the NSR requirements in the context of a cap and trade program. The purpose of the rule is to ensure that the RECLAIM program is equivalent to the federal and state NSR program requirements. Rule 2005 sets forth the pre-construction review requirements for new or modified equipment or processes at RECLAIM facilities. It provides three separate requirements to meet the NSR programmatic equivalency. Sources causing emissions increases must: (1) be equipped with Best Available Control Technology; (2) demonstrate by modeling that the operation will not result in a significant increase in the air quality concentration of nitrogen dioxide if the facility total emissions exceed its 1994 starting allocation plus non-tradable credits, and (3) hold sufficient RECLAIM Trading Credits to offset emission increases for one year prior to commencement of operation and at the beginning of every compliance year thereafter. Rule 2005 is currently in the SIP 76 *Fed. Reg.* 78,829 (*Dec. 20, 2011*).

With respect to the offset requirement, SCAQMD includes in its Annual RECLAIM Audit Report presented in March of each year to the Board an analysis of compliance with federal offset ratios. Most recently, the Annual RECLAIM Audit Report for Compliance Year 2015 was submitted to the Board and demonstrated compliance with federal offset requirements.

The Board action will be to certify compliance with the 2008 ozone NAAQS nonattainment NSR requirements based on the SCAQMD's existing approved NSR program.

### **Public Process**

A 30-day notice was published before holding the public hearing on the Nonattainment NSR Compliance Demonstration for the 2008 Ozone Standard. In addition, the SCAQMD's compliance was discussed in a public comment letter (dated January 6, 2017) that the SCAQMD submitted to the U.S. EPA, which is available for public viewing at <https://www.regulations.gov/document?D=EPA-HQ-OGC-2016-0693-0003>, and the Compliance Demonstration was presented to the Stationary Source Committee on April 21, 2017.

**Resource Impacts**

The Nonattainment NSR Compliance Demonstration for the 2008 Ozone Standard had nominal additional impact on SCAQMD resources. Staff is also committed to prepare any minor adjustments to SCAQMD rules if required by the U.S. EPA subsequent to SIP submittal to ensure compliance.

**California Environmental Quality Act (CEQA)**

Staff concludes that the Nonattainment NSR Compliance Demonstration for the 2008 Ozone Standard is not a “project” within the meaning of CEQA because it does not have the potential to result in either a direct physical change to the environment or a reasonably foreseeable indirect physical change to the environment pursuant to CEQA Guidelines § 15378(a), as it merely explains how existing rules satisfy federal requirements.

**AQMP and Legal Mandates**

The Nonattainment NSR Compliance Demonstration for the 2008 Ozone Standard is required by the federal Clean Air Act and 40 CFR § 51.1114. Compliance with NSR for nonattainment areas is part of the 2016 AQMP SIP and the attached compliance demonstration (Attachment B) is consistent with U.S. EPA guidelines.

**Attachments**

- A. Resolution
- B. Nonattainment NSR Compliance Demonstration
- C. Board Meeting Presentation

**ATTACHMENT A**  
**RESOLUTION NO. 17-\_\_\_\_\_**

**A Resolution of the South Coast Air Quality Management District (SCAQMD) Board certifying the Nonattainment New Source Review Compliance Demonstration for the 2008 Ozone Standard for the South Coast Air Basin and the Coachella Valley.**

**A Resolution directing staff to forward the certified Nonattainment New Source Review Compliance Demonstration to the California Air Resources Board (CARB) for review and submission to the United States Environmental Protection Agency (U.S. EPA) as a State Implementation Plan (SIP) revision.**

**WHEREAS**, U.S. EPA designated areas throughout the country as nonattainment for the 2008 Ozone National Ambient Air Quality Standards (NAAQS) and established classifications for the designated nonattainment areas; and

**WHEREAS**, the South Coast Air Basin (Basin) was classified as “extreme” nonattainment and the Coachella Valley, located in Riverside County, was classified as “severe-15” nonattainment with respect to the 2008 8-hour Ozone NAAQS, effective July 20, 2012; and

**WHEREAS**, the SCAQMD was required to submit a nonattainment NSR plan or plan revision for the 2008 ozone NAAQS no later than 36 months after the effective date of the area’s designation pursuant to 40 CFR § 51.1114; and

**WHEREAS**, in response to a consent decree in *Center for Biological Diversity v. McCarthy*, Case No. 4:16-cv-04092-PJH (N.D. Cal.), effective March 6, 2017, U.S. EPA found that 15 states and the District of Columbia failed to timely submit certain SIP revisions to satisfy various 2008 ozone NAAQS requirements that apply to nonattainment areas, including requirements for nonattainment New Source Review (NSR) for the Basin and Coachella Valley; and

**WHEREAS**, the SCAQMD Governing Board finds it necessary to certify the Nonattainment NSR Compliance Demonstration for the 2008 8-Hour Ozone NAAQS and submit it into the SIP; and

**WHEREAS**, based on the Clean Air Act (CAA) § 172 (c), 173 (c), and 182, and the California Health and Safety Code (H&SC) §§ 40460(a), 40913, and 40440, the SCAQMD is required and has the authority to adopt an Air Quality Management Plan (AQMP) as well as rules and regulations containing NSR requirements for nonattainment areas; and

**WHEREAS**, the CAA requires that areas classified as moderate nonattainment or higher must demonstrate emissions offsets for new or modified major stationary sources under the state's nonattainment NSR program, and requires more stringent obligations for each higher ozone nonattainment classification; and

**WHEREAS**, the nonattainment NSR requirements, set forth in § 182(e)(1) and (2) of the CAA for extreme nonattainment and § 182(d)(2) of the CAA for severe-15 nonattainment, have already been satisfied by the SCAQMD's existing NSR rules as demonstrated in the Nonattainment NSR Compliance Demonstration for the 2008 8-Hour Ozone NAAQS; and

**WHEREAS**, the SCAQMD Governing Board has determined that the Nonattainment NSR Compliance Demonstration for the 2008 8-Hour Ozone NAAQS provides the clarity needed to satisfy the failure to submit finding, is consistent with the CAA requirements, and is non-duplicative of any rule or regulation; and

**WHEREAS**, the SCAQMD Governing Board has determined that the Nonattainment NSR Compliance Demonstration for the 2008 8-Hour Ozone NAAQS is not considered a "project" pursuant to the California Environmental Quality Act (CEQA); and

**WHEREAS**, the SCAQMD Governing Board has determined that no socioeconomic impact will result from the Nonattainment NSR Compliance Demonstration for the 2008 8-Hour Ozone NAAQS; and

**WHEREAS**, the SCAQMD Governing Board has held a public hearing to consider approval of the Nonattainment NSR Compliance Demonstration for the 2008 8-Hour Ozone NAAQS in accordance with all provisions of law; and

**WHEREAS**, the SCAQMD specifies the manager of the Nonattainment NSR Compliance Demonstration as the custodian of the documents or other materials which constitute the record of proceedings upon which the approval is based, which is located at the SCAQMD, 21865 Copley Drive, Diamond Bar, CA 91765.

**NOW, THEREFORE, BE IT RESOLVED**, that the SCAQMD Governing Board certifies that the Nonattainment NSR Compliance Demonstration fulfills the CAA requirements for the 2008 8-Hour Ozone NAAQS for the Basin and the Coachella Valley.

**BE IT FURTHER RESOLVED**, that the SCAQMD Governing Board requests that the Nonattainment NSR Compliance Demonstration for the 2008 8-Hour Ozone NAAQS be submitted into the SIP.



**BE IT FURTHER RESOLVED**, that the SCAQMD Governing Board requests that submittal of the Nonattainment NSR Compliance Demonstration for the 2008 8-Hour Ozone NAAQS into the California SIP will avoid the triggering of sanctions or the promulgation of a Federal Implementation Plan (FIP).

**BE IT FURTHER RESOLVED**, that the Executive Officer is hereby directed to forward a copy of this Resolution and the certified Nonattainment NSR Compliance Demonstration (Attachment B) for the 2008 8-Hour Ozone NAAQS to CARB for approval and subsequent submittal to the U.S. EPA for inclusion into the SIP.

**Attachment**

Nonattainment NSR Compliance Demonstration

DATE: \_\_\_\_\_

\_\_\_\_\_  
Clerk of the Boards

## Attachment B

### Nonattainment NSR Compliance Demonstration

SCAQMD's New Source Review (NSR) program implements the federal statutory and regulatory requirements for NSR and ensures that construction and operation of new, relocated, and modified stationary sources does not interfere with progress towards attainment of the National Ambient Air Quality Standards (NAAQS). SCAQMD's NSR rules (Reg XIII), adopted in 1979, significantly amended in 1990, and again amended in 1995, were approved by EPA into the SIP in December 1996. 61 Fed. Reg. 64,291. EPA's approval concluded that the District's NSR program meets the requirements for extreme ozone areas. 61 Fed. Reg. at 64,292, *see also* 64 Fed. Reg. 13,514 (Mar. 19, 1999), 71 Fed. Reg. 35,157 (June 19, 2006). As such, the nonattainment NSR requirement, set forth in § 182(e)(1) and (2) of the Federal Clean Air Act (CAA) for extreme nonattainment areas and § 182(d)(2) of the CAA for severe-15 nonattainment areas, has already been satisfied by the SCAQMD's existing NSR rules. However, given the requirement in the Final Rule entitled *Implementation of the 2008 National Ambient Air Quality Standards for Ozone: State Implementation Plan Requirements*, 80 Fed. Reg. 12,264 (Mar. 6, 2015), that states must submit "a nonattainment NSR plan or plan revision for the 2008 ozone NAAQS," and EPA's February 2017 finding of nonsubmittal, the SCAQMD is submitting a plan revision certifying that the current SCAQMD NSR program meets the federal statutory and regulatory requirements. 40 CFR § 51.1114.

The following is a checklist of Nonattainment NSR (NNSR) plan requirements for the 2008 8-hour ozone NAAQS, developed based on the 1997 Ozone NAAQS Phase 2 Implementation Final Rule (70 FR 71612, November 29, 2005) and the 2008 Ozone NAAQS SIP Requirements Final Rule (80 FR 12264, March 6, 2015). The demonstration includes an analysis of the SCAQMD NSR rules (Reg III) and the NSR requirements under the District's RECLAIM (REgional CLean Air Incentives Market) program.

**Table 1**  
**2008 Ozone NAAQS Nonattainment NSR SIP Requirements**

<b>40 CFR 51.165 Checklist</b>		<b>Compliance Demonstration</b> SCAQMD Regulation XIII & Regulation XX
1.	(a)(1)(iv)(A)(I)(i)-(iv) and (2): Major source thresholds for ozone – VOC and NO <sub>x</sub>	SCAQMD Rule 1302(s), and Rule 2000(c)(45)
2.	(a)(1)(iv)(A)(3): Change constitutes a major source by itself	SCAQMD Rule 1302(x), Rule 1303(a)(1) & (b)(2), Rule 2000(c)(48), and Rule 2005 (b) & (c)
3.	(a)(1)(v)(E): Significant net emissions increase of NO <sub>x</sub> is significant for ozone	SCAQMD Rule 1302(x), (z) & (af), Rule 1303(a)(1) & (b)(2), and Rule 2005

## Attachment B (cont.)

**Table 1 (Concluded)**  
**2008 Ozone NAAQS Nonattainment NSR SIP Requirements**

40 CFR 51.165 Checklist		Compliance Demonstration SCAQMD Regulation XIII & Regulation XX
4.	(a)(1)(v)(F): Any emissions change of VOC in Extreme area triggers NNSR	SCAQMD Rule 1302(x), (z) & (af), and Rule 1303(a)(1) & (b)(2)
5.	(a)(1)(x)(A)-(C) and (E): Significant emissions rates for VOC and NO <sub>x</sub> as ozone precursors	SCAQMD Rule 1302(r), Rule 1303(a)(1), Rule 2000(c)(44), and Rule 2005
6.	(a)(3)(ii)(C)(1)-(2): Provisions for emissions reduction credits	SCAQMD Rule 1309, Rule 2002, and 2016 AQMP Appendix III
7.	(a)(8): Requirements for VOC apply to NO <sub>x</sub> as ozone precursors	SCAQMD 1302(z), and Rule 1303
8.	(a)(9)(ii)-(iv) <sup>1</sup> : Offset ratios for VOC and NO <sub>x</sub> for ozone nonattainment areas	Rule 1303(b)(2)(A), Rule 1315, and Rule 2005(b),(c) & (f)
9.	(a)(12): Anti-backsliding provision(s), where applicable	SCAQMD continues to implement the NSR program (Reg. XIII) at the major source threshold and offset requirements as an extreme nonattainment area for South Coast Air Basin (SCAB) and a severe nonattainment for Coachella Valley, including for revoked ozone standards, and therefore demonstrates compliance with the anti-backsliding provisions for the NSR program.

As outlined in Table 1, the requirements at 40 CFR 51.165 for ozone and its precursors are addressed in the SCAQMD's NSR (Reg XIII and Reg XX) program. The section below describes the provisions that demonstrate how the District's existing NSR program satisfies the requirements for implementing the 2008 ozone NAAQS.

1. 40 CFR 51.165 (a)(1)(iv)(A)(1)(i)-(iv) and (2) provide the definitions of "major stationary source" for ozone. In any extreme ozone nonattainment area, a stationary source that emits, or has the potential to emit, 10 tons per year (tpy) of VOC or NO<sub>x</sub> is considered a major stationary source. For severe ozone nonattainment areas, the thresholds are set at 25 tpy of VOC or NO<sub>x</sub>.

SCAQMD Rule 1302 (Definitions) consists of the definitions for all terms relating to pre-construction review requirements for new and modified sources in the District's NSR program.

<sup>1</sup> Please note that subparagraphs (a)(9)(i)-(iii) were changed to (a)(9)(ii)-(iv) when the EPA added new subparagraph (a)(9)(i) under the 2008 PM<sub>2.5</sub> Implementation Rule.

## Attachment B (cont.)

For the South Coast Air Basin (Basin) - an extreme nonattainment area, Rule 1302(s) defines “major polluting facility” as any facility in the Basin that emits or has the potential to emit  $\geq 10$  tpy of NO<sub>x</sub> or VOC. For the Coachella Valley - a severe-15 nonattainment area, Rule 1302(s) defines “major polluting facility” as any facility in the Riverside County portion of the Salton Sea Air Basin that emits or has the potential to emit  $\geq 25$  tpy of NO<sub>x</sub> or VOC. Major stationary source under the District’s RECLAIM program<sup>2</sup> is defined under Rule 2000(c)(45) as any facility which emits, or has the potential to emit 10 tons per year or more of NO<sub>x</sub>. These thresholds are consistent with the requirements in 40 CFR 51.165.

2. 40 CFR 51.165 (a)(1)(iv)(A)(3) continues to provide the definition of “major stationary source”, stating that it also includes “Any physical change that would occur at a stationary source not qualifying under paragraphs (a)(1)(iv)(A)(1) or (2) of this section as a major stationary source, if the change would constitute a major stationary source by itself.”

The District’s NSR program requires the Executive Officer to “deny the Permit to Construct for any relocation or for any new or *modified* source which results in an emission increase of any nonattainment air contaminant, any ozone depleting compound, or ammonia, unless BACT is employed for the new or relocated source or for the actual modification to an existing source.” Rule 1303(a)(1)(emphasis added). BACT is defined to be at least as stringent as LAER for major sources (Rules 1303(a), 1302(h)). It also requires that facilities with a net increase in emissions of any pollutant offset their emissions for that pollutant. Rule 1303(b)(2), unless they are and will remain under 4 tpy. SCAQMD Rule 1302 (Definitions) defines “modification” as “any physical change in equipment, change in method of operation, or an addition to an existing facility, which may cause the issuance of air contaminants.” Rule 1302(x). Thus, the applicability of the SCAQMD NSR program goes beyond the definition of “major stationary source” in 40 CFR 51.165.<sup>3</sup>

SCAQMD Rule 2005 – New Source Review for RECLAIM, sets forth pre-construction review requirements for new facilities subject to the requirements of the RECLAIM program, for modifications to RECLAIM facilities, and for facilities which increase their allocation to a level greater than their starting Allocation plus non-tradable credits. Rule 2005(b) and (c). Rule 2000(c)(48) defines “modification” as “any physical change or change in the method of operation of a source.” As such, the NSR requirements for the RECLAIM program satisfy 40 CFR 51.165 (a)(1)(iv)(A)(3).

3. 40 CFR 51.165 (a)(1)(v) concerns “major modifications” in an NSR program. Part (E) of this section requires that for purposes of “applying the requirements of (a)(8) of this section to modifications at major stationary sources of nitrogen oxides located in ozone

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<sup>2</sup> RECLAIM is an emissions cap and trade program that was developed to reduce NO<sub>x</sub> and SO<sub>x</sub> emissions in SCAQMD.

<sup>3</sup> Sources using the Priority Reserve and other exempt sources are discussed below.

## Attachment B (cont.)

nonattainment areas or in ozone transport regions, whether or not subject to subpart 2, part D, title I of the Act, any significant net emissions increase of nitrogen oxides is considered significant for ozone.”<sup>4</sup>

The District’s NSR program requires that any relocation, new, or *modified* source resulting in an emission increase of any nonattainment air contaminant apply BACT. Rule 1303(a)(1). BACT is defined as at least as stringent as LAER for major sources (*see* Rules 1303 and 1302(h)). It also requires that facilities with a net increase in emissions of any pollutant offset their emissions for that pollutant. Rule 1303(b)(2). SCAQMD Rule 1302 defines “modification” as “any physical change in equipment, change in method of operation, or an addition to an existing facility, which may cause the issuance of air contaminants.” Rule 1302(x). Rule 1302 defines the term “nonattainment air contaminant” to include “any air contaminant for which there is a national or state ambient air quality standard, or precursor to such air contaminant.” Rule 1302(z). VOC and NO<sub>x</sub> are identified as precursors of ozone in the NSR program. Rule 1302(af). As such, any net emissions increase of nitrogen oxides is subject to NSR, not just “significant” levels. (*See* Item 5 below.)

RECLAIM facilities are subject to SCAQMD Rule 2005 – New Source Review for RECLAIM, in accordance with a market-based approach. Specifically, RECLAIM facilities must provide (hold), prior to the start of operation, sufficient RECLAIM Trading Credits to offset the annual increase in potential emissions. Rule 2005(b)(2)(A) and (c)(2). All new RECLAIM facilities that received all District Permits to Construct on or after October 15, 1993, as well as all other RECLAIM facilities that increase their annual allocations above the level of their starting allocations plus non-tradable/non-usable credits, must provide sufficient RTCs to offset the annual potential emissions increase from new or modified source(s) at the commencement of each compliance year after the start of operation of the new or modified source(s). Rule 2005(c)(4)(B) and (f). Sources causing emissions increases must be equipped with BACT. Rule 2005(b)(1)(A), (c)(1)(A) and (c)(4).

4. 40 CFR 51.165 (a)(1)(v) concerns “major modifications” in an NSR program. Part (F) of this section requires that “Any physical change in, or change in the method of operation of, a major stationary source of volatile organic compounds that results in any increase in emissions of volatile organic compounds from any discrete operation, emissions unit, or other pollutant emitting activity at the source shall be considered a significant net emissions increase and a major modification for ozone, if the major stationary source is located in an extreme ozone nonattainment area that is subject to subpart 2, part D, title I of the Act.”

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<sup>4</sup> Section (a)(8) referenced above states that “the requirements of this section applicable to major stationary sources and major modifications of volatile organic compounds shall apply to nitrogen oxides emissions from major stationary sources and major modifications of nitrogen oxides in an ozone transport region or in any ozone nonattainment area, except in ozone nonattainment areas or in portions of an ozone transport region where the Administrator has granted a NO<sub>x</sub> waiver ....”

## Attachment B (cont.)

The District's NSR program requires that any relocation, new, or *modified* source resulting an emission increase of any nonattainment air contaminant apply BACT. Rule 1303(a)(1). It also requires that facilities with a net increase in emissions of any pollutant offset their emissions for that pollutant. Rule 1303(b)(2). SCAQMD Rule 1302 defines "modification" as "any physical change in equipment, change in method of operation, or an addition to an existing facility, which may cause the issuance of air contaminants." Rule 1302(x). Rule 1302 defines the term "nonattainment air contaminant" to include "any air contaminant for which there is a national or state ambient air quality standard, or precursor to such air contaminant." Rule 1302(z). VOC are identified as precursors of ozone. Rule 1302(af). As such, any relocation, new, or *modified* source resulting an emission increase of VOC triggers NNSR, including BACT and offsets, in South Coast Air Basin.

5. 40 CFR 51.165 (a)(1)(x) addresses what it means to be a "significant" net emissions increase in an NSR program. The significant emission rate outlined in § 51.165 (a)(1)(x)(A) for ozone is 40 tpy of VOC or NO<sub>x</sub> pollutant.

Notwithstanding the rate discussed above, per (a)(1)(x)(B), significant means "any increase in actual emissions of volatile organic compounds that would result from any physical change in, or change in the method of operation of, a major stationary source locating in a serious or severe ozone nonattainment area ... if such emissions increase of volatile organic compounds exceeds 25 tons per year."

Section (a)(1)(x)(C) states that for the purposes of applying the requirements of paragraph (a)(8) to modifications at major stationary sources of nitrogen oxides, "the significant emission rates and other requirements for volatile organic compounds ... shall apply to nitrogen oxides emissions."

Finally, per section (a)(1)(x)(E), notwithstanding the significant emissions rates for ozone discussed above, "any increase in actual emissions of volatile organic compounds from any emissions unit at a major stationary source of volatile organic compounds ... shall be considered a significant net emissions increase."

In the SCAQMD's program, any new or modified source which results in an emission increase of any nonattainment air contaminant (i.e. NO<sub>x</sub> / VOC) is subject to the BACT and offset (except for Priority Reserve and exempt sources, discussed below in Item 8) requirements, thus the threshold is anything greater than zero. Rule 1303(a)(1). Rule 1302 defines the term "major modification" to include any physical change in equipment, change in method of operation, or an addition to an existing facility that will cause an increase of one pound per day or more, of the facility's potential to emit NO<sub>x</sub> and VOC, provided the facility is located in SCAB. Rule 1302(r)(1). For an existing major polluting facility located in Coachella Valley, major modification means any modification that will cause an increase of 25 tons per year or more, of the facility's potential to emit NO<sub>x</sub> or VOC. Rule 1302(r).

## Attachment B (cont.)

For the RECLAIM NSR program, “major modification” is defined under Rule 2000 (c)(44) as any modification at an existing major polluting facility that will cause an increase of one or more pounds per day in the facility's potential to emit NO<sub>x</sub> or VOC, provided the facility is located in the South Coast Air Basin; or any modification that will cause an increase of 25 tons per year or more, in the facility's potential to emit NO<sub>x</sub> or VOC, provided the facility is located in the Coachella Valley.

Overall, the thresholds of “major modification” in Rule 1302 and Rule 2000 are equal to or lower than those listed in § 51.165 (a)(1)(x)(A). The District’s NSR program (Reg XIII and Rule 2005) applies to any new or modified source which results in an emission increase of NO<sub>x</sub> or VOC. Thus, the requirements in § 51.165 (a)(1)(x)(B), (C) and (E) are satisfied.

6. 40 CFR 51.165 (a)(3)(ii)(C)(1)-(2) describes provisions for emissions reduction credits.

Section (a)(3)(ii)(C)(1) provides that the SIP shall provide that emissions reductions achieved by shutting down an existing emission unit or curtailing production or operating hours may be credited for offsets if they meet the following requirements:

- Such reductions are surplus, permanent, quantifiable, and federally enforceable;
- The shutdown or curtailment occurred after the last day of the base year for the SIP planning process. A reviewing authority may choose to consider a prior shutdown or curtailment to have occurred after the last day of the base year “if the projected emissions inventory used to develop the attainment demonstration explicitly includes the emissions from such previously shutdown or curtailed emission units.”

Section (a)(3)(ii)(C)(2) provides that the emissions reductions that do not meet the requirements in paragraph (a)(3)(ii)(C)(1)(i) may be generally credited only if:

- The shutdown or curtailment occurred on or after the date the construction permit application is filed; or
- The applicant can establish that the proposed new emissions unit is a replacement for the shutdown or curtailed emissions unit, and the emissions reductions achieved by the shutdown or curtailment met the requirements of paragraph (a)(3)(ii)(C)(1)(i).

SCAQMD Rule 1309 addresses the application, eligibility, registration, use, and transfer of Emission Reduction Credits (ERCs) and Short Term Credits (STCs) that are used as offsets for emission increases at new or modified facilities subject to Rule 1303(b)(2). Under Rule 1309, all stationary and mobile source reductions must be demonstrated to be: (A) real; (B) quantifiable; (C) permanent; (D) federally enforceable, and (E) not greater than the equipment would have achieved if operating with current BACT to be eligible as ERCs (i.e. surplus). Rule 1309 (b)(4)(A)-(E). Thus, the provisions in Rule 1309 satisfy the federal statutory requirements for emission reduction credits in an NSR program.

## Attachment B (cont.)

Evaluation of the pre-base year offsets is found in the 2016 Air Quality Management Plan (Appendix III, Page III-2-74<sup>5</sup>). Shutdowns and curtailments that occurred prior to the last day of the base year are explicitly included in the projected emissions inventory as growth. As the AQMP explains, the growth of point and area sources subject to NSR offset requirements necessarily comes from pre-base year offsets that were shut down before the base year. This is because emissions offsets derived from sources that shutdown after the base year are accounted for in the baseline inventory. When those sources shut down, the most their offsets can do is replace the emissions from that shutdown source. Any growth above that base year is therefore supported from the offsets derived from the pre-base year reductions. Table III-2-20 shows that the growth projection for sources subject to NSR consists of emissions from pre-base year shutdowns. The District's NSR program is thus consistent with the requirements of 40 CFR 51.165(a)(3)(i)(C)(1)-(2).

SCAQMD Rule 2002 (Allocations for Oxides of Nitrogen (NO<sub>x</sub>) and Oxides of Sulfur (SO<sub>x</sub>)) addresses the treatment of emissions reduction credits for the RECLAIM program. Upon NO<sub>x</sub> RECLAIM facility shutdowns, RECLAIM Trading Credits (RTCs) are reduced to the equivalent to the average emissions of the highest 2 years from the previous 5 years of operation, less the emissions that would have occurred if the most stringent BARCT were applied. Additional provisions regarding RTC availability upon facility shutdowns can be found in Rule 2002(i).

7. 40 CFR 51.165 (a)(8) states that requirements applicable to “major stationary sources and major modifications of volatile organic compounds shall apply to nitrogen oxides emissions from major stationary sources and major modifications of nitrogen oxides.”

Any nonattainment air contaminant, including NO<sub>x</sub> and VOC as ozone precursors, are subject to SCAQMD Rule 1303 (NSR Requirements) provisions. Rule 1302(z). RECLAIM facilities are subject to RECLAIM NSR (Rule 2005) in accordance with a market-based approach. Thus, the NSR requirements applicable to major stationary sources and major modifications of VOC (including provisions regarding major modifications, significant emission rates, and offsets) also apply to NO<sub>x</sub> emissions.

8. 40 CFR 51.165 (a)(9)(ii)-(iv) describes the requirements of offset ratios for VOC and NO<sub>x</sub> for ozone nonattainment areas. For severe and extreme nonattainment areas, § 51.165 (a)(9)(ii) requires the offset ratio to be “at least 1.2:1 if the approved plan also requires all existing major sources in such nonattainment area to use BACT for the control of VOC”. § 51.165 (a)(9)(ii)(D) & (E).

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<sup>5</sup> <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/appendix-iii.pdf?sfvrsn=6>



## Attachment B (cont.)

The offset ratios for the District's NSR program are described in Rule 1303 (b)(2)(A). Unless a source is exempt from the offset requirements, it must offset its emission increase by either (1) ERCs (Rule 1309); or (2) allocations from the District's Priority Reserve (Rule 1309.1). Rule 1303(b)(2)(A). Offset ratios shall be 1.2-to-1.0 for ERCs, and 1.0-to-1.0 for allocations from the Priority Reserve. The SCAQMD requires that all existing major sources employ BARCT, which is defined similarly to federal BACT (Health & Saf. Code § 40406), therefore, sources within the District can use a 1.2-to-1 offset ratio for ozone precursors (i.e., NO<sub>x</sub> and VOC).

With respect to sources that are exempt from the SCAQMD's offset requirements pursuant to Rule 1304 or qualify for offsets from the SCAQMD's Priority Reserve, which has an emission offset ratio of 1.0-to-1.0, Rule 1315 – Federal New Source Review Tracking System, maintains the SCAQMD's ability to issue permits to these sources. (77 Fed. Reg. 31200 (May 25, 2012.)) The SCAQMD's computerized emission tracking system is utilized to demonstrate equivalence with federal offset requirements on an aggregate basis. Each year, a status report is prepared by the SCAQMD staff to demonstrate compliance with federal NSR requirements by establishing aggregate equivalence with federal offset requirements for sources that were not exempt from federal offset requirements, but were either exempt by the District from offsets or obtained their offsets from the Priority Reserve. Federal debit and credit accounting for SCAQMD's offset accounts is conducted pursuant to the same procedures previously agreed to by U.S. EPA and as delineated in Rule 1315. For federal equivalency demonstrations, an offset ratio of 1.2-to-1.0 is used for extreme non-attainment pollutants (ozone and ozone precursors, *i.e.*, VOC and NO<sub>x</sub>). That is, 1.2 pounds are deducted from SCAQMD's offset accounts for each pound of maximum allowable permitted potential to emit VOC or NO<sub>x</sub> increase at a federal source. More details about the debit and credit accounting, as well as the detailed listing of actual final withdrawals, deposits, and sum of withdrawals and deposits can be found in the yearly Status Report on Regulation XIII – New Source Review.<sup>6</sup> Overall, SCAQMD's NSR program is considered to provide equivalent or greater offsets of emissions as required by federal requirements for each subject pollutant provided the balance of offsets left in the SCAQMD's federal offset account for each pollutant remains positive, indicating that there were adequate offsets available.

SCAQMD Rule 2005 - New Source Review for RECLAIM, implements the NSR requirements in the context of a cap and trade program. There are three requirements for RECLAIM that provide NSR programmatic equivalency. First, RECLAIM facilities must provide (hold), prior to the start of operation, sufficient RECLAIM Trading Credits to offset the annual increase in potential emissions for the first year of operation at a 1-to-1 ratio. Rule 2005(b)(2)(A) and (c)(2). All new RECLAIM facilities that received all District Permits to Construct on or after October 15, 1993, as well as all other RECLAIM facilities that increase their annual allocations above the level of their starting allocations plus non-tradable/non-usable credits, must provide sufficient RTCs to offset the annual potential emissions increase from new or modified source(s) at a 1-to-1 ratio at the commencement of each compliance year after the start of operation of the new or modified source(s). Rule 2005(c)(4)(B) and (f). Second, the facility must demonstrate by modeling that the operation will not result in a significant increase in the air quality concentration of NO<sub>x</sub> if the facility's total emissions exceed its 1994 starting allocation plus non-

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<sup>6</sup> The most recent Status Report on Regulation XIII – New Source Review can be found at: <http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2017/2017-mar3-034.pdf?sfvrsn=4>

## Attachment B (concluded)

tradable credits. Rule 2005(b)(1)(B) and (c)(1)(B). Third, sources causing emissions increases must be equipped with BACT. Rule 2005(b)(1)(A), (c)(1)(A) and (c)(4). Although RECLAIM allows a 1-to-1 offset ratio for emissions increases, RECLAIM complies with the federal 1.2-to-1 offset requirement for NO<sub>x</sub> on an aggregate basis. If aggregate RECLAIM emissions do not exceed aggregate allocations, all unused allocations are available to provide offsets beyond the 1-to-1 ratio for NSR emission increases. Each year, an annual program audit report is provided to assess NSR permitting activities to verify that programmatic compliance of RECLAIM with federal and state NSR requirements has been maintained. In the most recent Annual RECLAIM Audit Report for Compliance Year 2015, RECLAIM demonstrated federal equivalency with a programmatic NO<sub>x</sub> offset ratio of 39-to-1 based on the compliance year's total unused allocations and total NSR emission increases for NO<sub>x</sub>.<sup>7</sup> Overall, RECLAIM complies with the federal 1.2-to-1 offset requirement for NO<sub>x</sub> on an aggregate basis, as verified yearly through the Annual RECLAIM Audit Report.

9. 40 CFR 51.165 (a)(12) states that the SIP shall require that the NSR requirements shall include the anti-backsliding requirements as described in § 51.1105(f). That provision requires that “an area designated nonattainment for the 2008 ozone NAAQS and designated nonattainment for the 1997 ozone NAAQS on April 6, 2015 remains subject to the obligation to adopt and implement the major source threshold and offset requirements for nonattainment NSR ... based on the highest of: (i) The area's classification under CAA section 181(a)(1) for the 1-hour NAAQS as of the effective date of revocation of the 1-hour ozone NAAQS; (ii) the area's classification under 40 CFR 51.903 for the 1997 ozone NAAQS as of the date a permit is issued or as of April 6, 2015, whichever is earlier; and (iii) the area's classification under § 51.1103 for the 2008 ozone NAAQS.”

Although the federal 1-hour ozone standard was revoked effective June 15, 2005 and the 1997 ozone standard was subsequently revoked effective July 20, 2013, nonattainment areas are still subject to anti-backsliding provisions. SCAB was designated as extreme nonattainment for both the 1997 and 2008 8-hour ozone standard, as well as the 1-hour ozone standard. Therefore, the highest classification among the three ozone standards remains at extreme for SCAB. Similarly, Coachella Valley was designated as severe-15 for both the 1997 and 2008 8-hr ozone standard, and the highest classification remains at severe-15. The SCAQMD continues to implement the NSR program (Reg. XIII) at the major source threshold and offset requirements as an extreme nonattainment area for SCAB and a severe nonattainment area for Coachella Valley, and therefore demonstrates compliance with the anti-backsliding provisions for the NSR program.

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<sup>7</sup> Annual RECLAIM Audit Report for 2015 Compliance Year  
<http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2017/2017-mar3-038.pdf?sfvrsn=4>



# Certification of Nonattainment NSR Compliance Demonstration for the 2008 8-hour Ozone NAAQS

June 2, 2017  
Governing Board Meeting

*Cleaning The Air That We Breathe...*

# BACKGROUND

- ❑ Clean Air Act NSR requirement applies to new major stationary sources and major modifications in nonattainment areas
- ❑ SCAQMD has a federally-approved Nonattainment NSR plan
- ❑ EPA's NAAQS Implementation Requirements for 2008 Ozone Standard calls for nonattainment NSR plans due 36 months after July 20, 2012 (effective date of designation)
- ❑ On February 3, 2017, EPA issued Finding of Failure to Submit the Nonattainment NSR demonstration for 2008 ozone standard for the South Coast Air Basin (SCAB) and Coachella Valley

# ACTION TAKEN

- ❑ Prepared demonstration of compliance with the following nonattainment NSR requirements for both RECLAIM and non-RECLAIM sources:
  - ✓ Definition of major stationary source
  - ✓ Any significant net emissions increase of NO<sub>x</sub> is considered significant for ozone
  - ✓ Any emissions change of VOC in “extreme” area triggers NNSR
  - ✓ Significant emissions rates for VOC and NO<sub>x</sub>
  - ✓ Provisions for emission reduction credits
  - ✓ Requirements applicable to VOCs shall apply to NO<sub>x</sub>
  - ✓ Offset ratios for VOC and NO<sub>x</sub>
  - ✓ Anti-backsliding requirements
- ❑ No change to SCAQMD NSR program or requirements for affected facilities

# PUBLIC PROCESS

- ❑ 2016 AQMP included a discussion of the nonattainment NSR requirement but not a detailed compliance demonstration requested by U.S. EPA
- ❑ SCAQMD submitted a public comment letter to U.S. EPA regarding a proposed consent decree on January 6, 2017 (*available online*)
- ❑ Compliance demonstration is not a “project” under CEQA and there is no socioeconomic impact
- ❑ 30-day public hearing notice published on May 2, 2017

# RECOMMENDED BOARD ACTION

- ❑ Certify the Nonattainment NSR Compliance Demonstration for the 2008 8-Hour Ozone NAAQS
- ❑ Expedite transmittal to CARB for approval and subsequent submittal to U.S. EPA
- ❑ Adopt the Resolution that directs submittal into the SIP (will avoid triggering sanctions)