



South Coast Air Quality Management District

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

A G E N D A

MEETING, JULY 6, 2018

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) or contact the Clerk of the Board, (909) 396-2500. Copies of revised agendas will also be available at the Board meeting.

CALL TO ORDER

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

Staff/Phone (909) 396-

CONSENT CALENDAR (Items 1 through 16)

Note: Consent Calendar items held for discussion will be moved to Item No. 17

1. Approve Minutes of June 1, 2018 Board Meeting **Garzaro/2500**

Budget/Fiscal Impact

2. Approve Memorandum of Agreement Between CARB and SCAQMD to Implement and Enforce Greenhouse Gas Emission Standards for Crude Oil and Natural Gas Facilities and Recognize Revenue **Coleman/2415**

CARB adopted the "Greenhouse Gas Emission Standards for Crude Oil and Natural Gas Facilities (CARB Oil and Gas Regulation)," effective in final form on October 1, 2017. CARB has discretion to enter into an agreement with the SCAQMD to cooperatively implement and enforce the CARB Oil and Gas Regulation. This action is to authorize the Executive Officer to execute a Memorandum of Agreement with CARB to implement and enforce greenhouse gas emission standards for crude oil and natural gas facilities. This action is to also recognize up to \$150,000 in revenue from CARB for FY 2018-19 and \$125,000 per year thereafter. (Reviewed: Stationary Source Committee, June 15, 2018)

3. Recognize Revenue from Participating Members of California Natural Gas Vehicle Partnership, Transfer Funds for SCAQMD's Membership, and Approve Budget and Expenditures for Activities and Projects during FYs 2018-19 and 2019-20 **Miyasato/3249**

The Board established the California Natural Gas Vehicle Partnership (CNGVP) to promote greater deployment of natural gas vehicles in California. To fund program administration, activities and projects, and achieve the goals of the CNGVP, the Voting Members of the Steering Committee pay dues for a two-year membership while Associate Members participate through in-kind contributions. These actions are to: 1) recognize revenue from participating and future CNGVP Members; 2) transfer \$25,000 from the Clean Fuels Program Fund (31) into the Natural Gas Vehicle Partnership Fund (40) for SCAQMD's two-year membership for FYs 2018-19 and 2019-20; 3) approve the FYs 2018-19 and 2019-20 CNGVP Budget; and 4) authorize the Executive Officer to approve individual expenditures, as approved by the CNGVP, for FYs 2018-19 and 2019-20 up to \$75,000 but not to exceed \$225,000 for each fiscal year. (Reviewed: Technology Committee, June 15, 2018; Recommended for Approval)

4. Recognize and Transfer Revenue and Execute Contract to Develop and Demonstrate Zero Emission Trucks and EV Infrastructure

Miyasato/3249

SCAQMD fosters development and demonstration of zero emission goods movement technologies. Daimler Trucks North America LLC (DTNA) proposes to develop 20 heavy-duty electric trucks with EV infrastructure that includes energy storage systems to demonstrate the trucks in real-world commercial fleet operations in and around environmental justice communities. These actions are to recognize revenue up to \$2,000,000 from the San Pedro Bay Ports and \$500,000 from U.S. EPA and transfer up to \$4,440,000 from the State Emissions Mitigation Fund (39) and \$11,230,072 from the Clean Fuels Program Fund (31) into the Advanced Technology Goods Movement Fund (61). Of the \$11,230,072, up to \$2,500,000 is for a temporary loan pending receipt of the cofunding and \$8,730,072 is for SCAQMD's cost-share for the project. Staff is actively seeking additional cofunding; if realized, SCAQMD's cost-share may decrease, subject to Board consideration. This action is to also execute a contract with DTNA to develop and demonstrate 20 heavy-duty electric trucks and EV infrastructure in an amount not to exceed \$15,670,072 from the Advanced Technology Goods Movement Fund (61). (Reviewed: Technology Committee, June 15, 2018; Recommended for Approval)

5. Execute and Amend Contracts for Technical Assistance for Advanced, Low and Zero Emissions Mobile and Stationary Source Technologies and Implementation of Incentive Programs

Minassian/2641

On February 2, 2018, the Board approved the release of an RFQ to solicit proposals to provide technical assistance, implementation and outreach support for advanced, low and zero emissions technologies for the Clean Fuels Program and various incentive funding programs. Sixteen proposals were received in response to the solicitation. These actions are to execute or amend contracts with 11 technical experts to provide technical assistance and outreach support in an amount not to exceed \$2,810,000, comprised of \$810,000 from the Clean Fuels Program Fund (31), \$450,000 from the Carl Moyer Program AB 923 Fund (80), \$375,000 from the Community Air Protection AB 134 Fund (77) and \$1,175,000 from the HEROS II Special Revenue Fund (56). Funding from the Carl Moyer AB 923, AB 134 and HEROS II special revenue funds will be from the administrative portion of those funds. (Reviewed: Technology Committee, June 15, 2018; Recommended for Approval)

6. Recognize Revenue and Transfer and Appropriate Funds for Air Monitoring Programs, and Issue Solicitations and Purchase Orders for Air Monitoring and Laboratory Equipment Plus One Vehicle **Low/2269**

SCAQMD has applied for U.S. Government Enhanced Particulate Monitoring Program grant funds for FY 2018-19 and, based on the estimate included in the FY 2018-19 Budget, is asking the Board to recognize additional revenue in anticipation of the FY 2018-19 grant award. In addition, U.S. EPA is expected to award up to \$238,502 for the NATTS Program for FY 2018-19. These actions are to recognize revenue and appropriate funds for the Enhanced Particulate Monitoring and NATTS Programs and remaining balances of the PAMS, Near-Road NO₂ and Community Scale Air Toxics Programs; transfer and appropriate funding for the remaining balance of the Community Air Toxics Initiative Program, funded by the BP ARCO Settlement Projects Fund (46); and issue solicitations and purchase orders for air monitoring and laboratory equipment plus one vehicle. (Reviewed: Administrative Committee, June 8, 2018; Recommended for Approval)

7. Authorize Executive Officer to Enter into CARB AB 197 Grant Agreement, Recognize Revenue, and Appropriate Funds to Support SCAQMD's Annual Emissions Reporting Software **Rees/2856**

Assembly Bill 197 (AB 197) requires the CARB to make available, and update at least annually, on its website the emissions of greenhouse gases, criteria pollutants, and toxic air contaminants for each facility that reports to the state board and air districts. CARB is allocating initial and ongoing funding to local air districts for implementation of emission reporting requirements pursuant to AB 197. This action is to: 1) authorize the Executive Officer to enter into the grant agreement with CARB; 2) recognize upon receipt in the General Fund up to \$50,000 in FY 2018-19 for initial funding and \$25,000 ongoing in subsequent years; and 3) appropriate \$50,000 to Information Management's FY 2018-19 budget, Services and Supplies Major Object, Professional and Specialized Services account to support the maintenance of the SCAQMD's Annual Emissions Reporting software. (Reviewed: Administrative Committee, June 8, 2018; Recommended for Approval)

8. Transfer and Appropriate Funds and Execute Contract for Short- and Long-Term Systems Development Maintenance and Support Services **Moskowitz/3329**

SCAQMD currently has contracts with several companies for short- and long-term systems development, maintenance and support services. These contracts are periodically amended as additional needs are defined. This action is to transfer and appropriate funds from the General Fund Undesignated (Unassigned) Fund Balance to Information Management's FY 2018-19 Budget and execute a contract with AgreeYa Solutions for needed development and maintenance work. (Reviewed: Administrative Committee, June 8, 2018; Recommended for Approval)

9. Approve Contract Awards and Modifications as Approved by MSRC **McCallon**

As part of their FYs 2016-18 Work Program, the MSRC approved new contracts and modifications to contracts under the Local Government Partnership Program. The MSRC also approved a replacement contract as part of their FY 2011-12 Work Program. At this time the MSRC seeks Board approval of the contract awards and modifications. (Reviewed: Mobile Source Air Pollution Reduction Review Committee, June 21, 2018; Recommended for Approval)

Items 10 through 16 - Information Only/Receive and File

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

This report highlights the May 2018 outreach activities of the Legislative, Public Affairs and Media Office, which include: Environmental Justice Update, Community Events/Public Meeting, Business Assistance, Media Relations, and Outreach to Business, Federal, State, and Local Government. (No Committee Review)

11. Report to Legislature and CARB on SCAQMD's Regulatory Activities for Calendar Year 2017 **Alatorre/3122**

The SCAQMD is required by law to submit a report to the Legislature and CARB on its regulatory activities for the preceding calendar year. The report is to include a summary of each rule and rule amendment adopted by SCAQMD, number of permits issued, denied, or cancelled, emission offset transactions, budget and forecast, and an update on the Clean Fuels program. Also included is the Annual RECLAIM Audit Report, as required by RECLAIM Rule 2015 - Backstop Provisions. (No Committee Review)

12. Hearing Board Report **Prussack/2500**

This reports the actions taken by the Hearing Board during the period of May 1 through May 31, 2018. (No Committee Review)

13. Civil Filings and Civil Penalties Report **Gilchrist/3459**

This reports the monthly penalties from May 1 through May 31, 2018, and legal actions filed by the General Counsel's Office from May 1 through May 31, 2018. An Index of District Rules is attached with the penalty report. (Reviewed: Stationary Source Committee, June 15, 2018)

14. 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 May 1, 2018 and May 31, 2018, and those projects for which the SCAQMD is acting as lead agency pursuant to CEQA. (No Committee Review)

15. Rule and Control Measure Forecast **Fine/2239**
This report highlights SCAQMD rulemaking activities and public workshops potentially scheduled for 2018. (No Committee Review)
16. Status Report on Major Ongoing and Upcoming Projects for Information Management **Moskowitz/3329**
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, June 8, 2018)
17. Items Deferred from Consent Calendar

BOARD CALENDAR

Note: The June meeting of the Mobile Source Committee was canceled. The next meeting of the Mobile Source Committee is scheduled for July 20, 2018.

18. Administrative Committee (Receive & File) **Chair: Burke Nastri/3131**
19. Legislative Committee **Chair: Mitchell Alatorre/3122**
Receive and file; and take the following actions as recommended:
- | Agenda Item | Recommendation |
|-----------------------------------------------------------------------------|-------------------------|
| AB 2145 (Reyes)
Vehicular air pollution | Support |
| SB 1260 (Jackson)
Fire prevention and protection:
prescribed burn | Support with Amendments |
| HR 4421 (DeSaulnier)
Establish parity for electric
vehicle technology | Pulled |
20. Refinery Committee (Receive & File) **Chair: Parker Fine/2239**
21. Stationary Source Committee (Receive & File) **Chair: Benoit Tisopoulos/3123**
22. Technology Committee (Receive & File) **Chair: Buscaino Miyasato/3249**

23. Mobile Source Air Pollution Reduction Review Committee (Receive & File) Board Liaison: Benoit Minassian/2641

24. California Air Resources Board Monthly Report (Receive & File) Board Rep: Mitchell Garzaro/2500

Staff Presentation/Board Discussion

25. Recommend Communities and Initial Implementation Schedule for Assembly Bill 617 Fine/2239

Assembly Bill (AB) 617 requires CARB, in consultation with air districts, to select communities for community air monitoring and/or the preparation of community emission reduction programs. AB 617 specifies that the highest priority areas shall be disadvantaged communities with a high cumulative exposure burden for criteria pollutants and/or toxic air contaminants. Staff has conducted significant public outreach and gathered community input on key factors to consider in prioritizing communities for this program. Public input was integrated in developing an approach to evaluate technical data and other community information to prioritize communities within SCAQMD's jurisdiction with local air quality issues that also experience significant socioeconomic burdens and other factors that may increase vulnerability or sensitivity to the effects of environmental pollution. This action is to seek approval to submit recommendations to CARB for their consideration in selecting communities for the initial implementation of AB 617. (Reviewed: Stationary Source Committee, June 15, 2018)

PUBLIC HEARINGS

26. Determine that Proposed Amendments to Rule 1111 – Reduction of NOx Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces are Exempt from CEQA and Amend Rule 1111 Nakamura/3105

At the Public Hearing to adopt amendments to Rule 1111 on March 2, 2018, the Board directed staff to propose additional labeling requirements to better inform consumers when a unit is subject to a mitigation fee. Based on feedback from stakeholders as well as additional direction from Board members, staff is recommending provisions that will require furnace manufacturers to notify consumers on all consumer brochures, technical specification sheets, and the manufacturer's website that the unit is subject to a mitigation fee and is not eligible for the Clean Air Furnace Rebate Program. This action is to adopt the Resolution: 1) Determining that the proposed amendments to Rule 1111 – Reduction of NOx Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces are exempt from the requirements of the California Environmental Quality Act; and 2) Amending Rule 1111 – Reduction of NOx Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces. (Reviewed: Stationary Source Committee, April 20 and May 18, 2018)

27. Receive and File 2017 Annual Report on AB 2588 Program; and Approve Updates to Facility Prioritization Procedure, Supplemental Guidelines for AB 2588 Program, and Guidelines for Participating in Rule 1402 Voluntary Risk Reduction Program Nakamura/3105

The Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588) requires local air pollution control districts to prepare an annual report. The report provides the public with information regarding SCAQMD programs to reduce emissions of toxic air contaminants. This annual update describes the various activities in 2017 to satisfy the requirements of AB 2588 and Rule 1402, such as quadrennial emissions reporting and prioritization, the preparation and review of Air Toxics Inventory Reports, Health Risk Assessments, Voluntary Risk Reduction Plans, Risk Reduction Plans, and additional SCAQMD activities related to air toxics. Staff is also updating the Facility Prioritization Procedure, the AB 2588 and Rule 1402 Supplemental Guidelines, and the Guidelines for Participating in the Rule 1402 Voluntary Risk Reduction Program to update information and provide more clarity for the implementation of AB 2588 and Rule 1402. These actions are to receive and file the 2017 Annual Report on the AB 2588 Air Toxics "Hot Spots" Program, and to approve revisions to: 1) Facility Prioritization Procedure for the AB 2588 Program; 2) AB 2588 and Rule 1402 Supplemental Guidelines; and 3) Guidelines for Participating in the Rule 1402 Voluntary Risk Reduction Program. (Reviewed: Stationary Source Committee, June 15, 2018)

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 contract modifications with University of California, Riverside CE-CERT (C156363 and C123763), Envirosuite (C182251), Comite Civico Del Valle, Inc. (C173591), and Gladstein, Neandross & Associates (C123087). University of California Riverside CE-CERT, Envirosuite, and Gladstein, Neandross & Associates are potential sources of income for Governing Board Member Joseph Lyou, which qualify for the remote interest exception of Section 1090 of the California Government Code. Comite Civico Del Valle, Inc. has entered into a contractual relationship with Dr. Lyou's non-profit employer, which also qualifies for the remote interest exception of Section 1090 of the Code. Dr. Lyou abstained from any participation in the making of the contract modifications.

CLOSED SESSION - (No Written Material)

Gilchrist/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:

- In the Matter of SCAQMD v. Aerocraft Heat Treating Co., Inc. and Anaplex Corp., SCAQMD Hearing Board Case No. 6066-1 (Order for Abatement);
- SCAQMD v. Anaplex, Los Angeles Superior Court Case No. BC608322 (Paramount Hexavalent Chromium);
- In the Matter of SCAQMD v. Browning-Ferris Industries of California, Inc. dba Sunshine Canyon Landfill, SCAQMD Hearing Board Case No. 3448-14;
- Communities for a Better Environment v. SCAQMD, Los Angeles Superior Court Case No. BS161399 (RECLAIM);
- Communities for a Better Environment v. South Coast Air Quality Management District, Los Angeles Superior Court Case No. BS169841; Safe Fuel and Energy Resources California, et al. v. South Coast Air Quality Management District, Los Angeles Superior Court Case No. BS169923 (Tesoro);
- People of the State of California, ex rel. SCAQMD v. Exide Technologies, Inc., Los Angeles Superior Court Case No. BC533528;
- In re: Exide Technologies, Inc., U.S. Bankruptcy Court, District of Delaware, Case No. 13-11482 (KJC) (Bankruptcy Case);
- Fast Lane Transportation, Inc., et al. v. City of Los Angeles, et al., Court of Appeals, First Appellate District, Case No. A148993 (formerly Contra Costa County Superior Court Case No. MSN14-0300) (SCIG);
- Johnson Controls, Inc. v. SCAQMD, Los Angeles Superior Court Case No. BS173108;
- Rainbow Transfer/Recycling, Inc. v South Coast Air Quality Management District, et al., Los Angeles Superior Case No. BS171620; In the Matter of SCAQMD v. Rainbow Transfer/Recycling, Inc., SCAQMD Hearing Board Case No. 4394-2;
- South Coast Air Quality Management District v. Top Shelf Consulting LLC, Los Angeles Superior Court, Case No. BC676606; In re: Top Shelf Consulting, LLC, U.S. Bankruptcy Court, Central District of California (Los Angeles), Case No. 2:18-bk-11975-ER (Bankruptcy case); and
- In the Matter of SCAQMD v. Torrance Refining Company, LLC, SCAQMD Hearing Board Case No. 6060-5 (Order for Abatement).

CONFERENCE WITH LEGAL COUNSEL – INITIATING LITIGATION

It is also necessary for the Board to recess to closed session pursuant to Government Code section 54956.9(a) and 54956.9(d)(4) to consider initiation of litigation (four cases).

ADJOURNMENT

*****PUBLIC COMMENTS*****

Members of the public are afforded an opportunity to speak on any agenda item before 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 will be limited to a total of three (3) minutes for the Consent Calendar and Board Calendar and three (3) minutes or less for other agenda items.

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 the Public Comment Period 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 of 10 pages or less including attachment, in MS WORD, PDF, 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	NESHAPS = National Emission Standards for Hazardous Air Pollutants
AQIP = Air Quality Investment Program	NGV = Natural Gas Vehicle
AQMP = Air Quality Management Plan	NOx = Oxides of Nitrogen
AVR = Average Vehicle Ridership	NSPS = New Source Performance Standards
BACT = Best Available Control Technology	NSR = New Source Review
Cal/EPA = California Environmental Protection Agency	OEHHA = Office of Environmental Health Hazard Assessment
CARB = California Air Resources Board	PAMS = Photochemical Assessment Monitoring Stations
CEMS = Continuous Emissions Monitoring Systems	PAR = Proposed Amended Rule
CEC = California Energy Commission	PEV = Plug-In Electric Vehicle
CEQA = California Environmental Quality Act	PHEV = Plug-In Hybrid Electric Vehicle
CE-CERT =College of Engineering-Center for Environmental Research and Technology	PM10 = Particulate Matter ≤ 10 microns
CNG = Compressed Natural Gas	PM2.5 = Particulate Matter ≤ 2.5 microns
CO = Carbon Monoxide	PR = Proposed Rule
CTG = Control Techniques Guideline	RECLAIM=Regional Clean Air Incentives Market
DOE = Department of Energy	RFP = Request for Proposals
EV = Electric Vehicle	RFQ = Request for Quotations
FY = Fiscal Year	SCAG = Southern California Association of Governments
GHG = Greenhouse Gas	SIP = State Implementation Plan
HRA = Health Risk Assessment	SOx = Oxides of Sulfur
LEV = Low Emission Vehicle	SOON = Surplus Off-Road Opt-In for NOx
LNG = Liquefied Natural Gas	SULEV = Super Ultra Low Emission Vehicle
MATES = Multiple Air Toxics Exposure Study	TCM = Transportation Control Measure
MOU = Memorandum of Understanding	ULEV = Ultra Low Emission Vehicle
MSERCs = Mobile Source Emission Reduction Credits	U.S. EPA = United States Environmental Protection Agency
MSRC = Mobile Source (Air Pollution Reduction) Review Committee	VOC = Volatile Organic Compound
NATTS =National Air Toxics Trends Station	ZEV = Zero Emission Vehicle

 [Back to Agenda](#)

BOARD MEETING DATE: July 6, 2018

AGENDA NO. 1

MINUTES: Governing Board Monthly Meeting

SYNOPSIS: Attached are the Minutes of the June 1, 2018 meeting.

RECOMMENDED ACTION:

Approve Minutes of the June 1, 2018 Board Meeting.

Denise Garzaro
Clerk of the Boards

DG

FRIDAY, JUNE 1, 2018

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:

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

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

Mayor Ben Benoit,
Cities of Riverside County

Supervisor Marion Ashley
County of Riverside

Council Member Joe Buscaino (Arrived at 9:25 a.m.)
City of Los Angeles

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

Dr. Joseph K. Lyou
Governor's Appointee

Mayor Larry McCallon
Cities of San Bernardino County

Mayor Pro Tem Judith Mitchell
Cities of Los Angeles County – Western Region

Council Member Dwight Robinson
Cities of Orange County

Supervisor Janice Rutherford
County of San Bernardino

Supervisor Hilda L. Solis
County of Los Angeles

Member absent:

Supervisor Shawn Nelson
County of Orange

CALL TO ORDER: Chairman Burke called the meeting to order at 9:05 a.m.

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

Dr. Parker reported that he attended the SCAQMD Healthy Living and Clean Air Fair for Seniors at the Los Angeles Convention Center on May 17, 2018, where Los Angeles City Council President Herb J. Wesson, Jr. presented the keynote speech to over 2,000 attendees. He noted that senior citizens are particularly susceptible to the health effects of pollution and expressed support for hosting additional senior events in other communities.

Council Member Cacciotti commented on his recent experience test driving the Chevrolet Bolt and noted the technological advancements that have been made for electric vehicles.

Chairman Burke recognized Charlene Nguyen, Assistant Air Quality Specialist, for receiving the 3M Personal Safety Division Occupational Health and Safety Scholarship and noted that she started at the District as an intern before becoming a full-time employee, and is pursuing a Ph.D. He thanked her for her dedicated service to the District.

Chairman Burke recognized the District employees who participated in Bike-to-Work day on May 3, 2018 and presented a plaque to Council Member Cacciotti in recognition of his participation in the event.

Chairman Burke announced that item number 24 would be taken out of order to allow for the recognition of employees who have contributed to the success of the permit backlog reduction effort.

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Staff Presentation/Board Discussion

24. Status Report on Permit Backlog Reduction Effort

Dr. Laki Tisopulos, DEO/Engineering and Permitting, provided an update on the status of the District's permit backlog reduction effort.

(Council Member Buscaino arrived at 9:25 a.m.)

Chairman Burke recognized Engineering and Permitting staff present in the auditorium and expressed appreciation for their efforts in meeting the goal to reduce the permit backlog by fifty percent ahead of schedule and under budget.

Supervisor Rutherford praised staff for reducing the permit backlog and the development of an online permit processing system. She commented on her role in the development of the application processing system after seeing a similar program in place at the Bay Area AQMD and commended staff for quickly implementing the new system.

Bill LaMarr, California Small Business Alliance, expressed support for the work that has been accomplished in reducing the permit backlog and noted the benefits that an automated permit processing system will provide to business owners.

Curtis Coleman, Southern California Air Quality Alliance, expressed appreciation to staff for their efforts to reduce the permit backlog and the development of the automated permitting system.

Mr. Nastri acknowledged the dedication and efforts of staff in exceeding the goals that were set to reduce the backlog and noted the team effort across multiple District departments that contributed to the project's success.

INFORMATION ONLY; NO ACTION NECESSARY.

CONSENT CALENDAR

1. Approve Minutes of May 4, 2018 Board Meeting
2. Set Public Hearing July 6, 2018 to Consider Adoption of and/or Amendments to SCAQMD Rules and Regulations:

Determine that Proposed Amendments to Rule 1111 – Reduction of NOx Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces are Exempt from CEQA and Amend Rule 1111

Budget/Fiscal Impact

3. Execute Contracts to Implement Recommendations to Enhance Socioeconomic Assessments for AQMP
4. Execute Contract for Heavy-Duty Hydrogen Vehicle Fueling Station and Receive and File California Fuel Cell Partnership Board Meeting Agenda and Activity Updates

5. Adopt Resolution Recognizing Revenue and Accepting Terms and Conditions for Funding Agricultural Replacement Measures for Emission Reductions Program and Reimburse General Fund for Administrative Costs
6. Establish Special Revenue Fund, Recognize Revenue, and Issue Solicitations and Purchase Orders for Community Air Monitoring Stations Near Petroleum Refineries
7. Execute Contract for Removal and Replacement of Parking Structure Waterproof Coating
8. Recognize Revenue and Appropriate Funds for AB 617 Implementation
9. Approve Contract Awards and Modification as Approved by MSRC

Items 10 through 15 - Information Only/Receive and File

10. Legislative, Public Affairs and Media Report
11. Hearing Board Report
12. Civil Filings and Civil Penalties Report
13. Lead Agency Projects and Environmental Documents Received by SCAQMD
14. Rule and Control Measure Forecast
15. Status Report on Major Ongoing and Upcoming Projects for Information Management

BOARD CALENDAR

- 17A. Administrative Committee
- 17B. Special Administrative Committee
18. Investment Oversight Committee

19. Mobile Source Committee
20. Stationary Source Committee
21. Technology Committee
22. Mobile Source Air Pollution Reduction Review Committee
23. California Air Resources Board Monthly Report

OTHER BUSINESS

26. Issue RFP to Seek Contractors to Assist in Planning, Organizing, and Facilitating Two Annual Community Air Quality Events

Dr. Lyou announced his abstention on Item No. 4 because Toyota is a potential source of income to him; and on Item No. 9 because the Los Angeles County Metropolitan Transportation Authority is a potential source of income to him.

Supervisor Ashley announced his abstention on Item No. 6 because of a financial interest in Chevron.

Mayor Pro Tem Mitchell noted that she is a Board Member of the CARB which is involved with Item Nos. 5 and 8.

Supervisor Solis noted that she is a Board Member of the Los Angeles County Metropolitan Transportation Authority which is involved with Item No. 9.

Mr. Nastri inquired whether Item 26 would be included with the Consent Calendar items and Chairman Burke responded affirmatively. Mr. Nastri also noted that due to the CARB meeting occurring just last Friday, May 25, the meeting summary was not yet available, and as such, Item No. 23 was being pulled from consideration.

Agenda Item Nos. 2, 9 and 14 were withheld for comment and discussion.

MOVED BY SOLIS, SECONDED BY ROBINSON, AGENDA ITEMS 1, 3 THROUGH 8, 10 THROUGH 13, 15 THROUGH 22 AND 26 APPROVED AS RECOMMENDED, RECEIVING AND FILING THE COMMITTEE, AND MSRC REPORTS, AND ADOPTING RESOLUTION NO. 18-11 RECOGNIZING REVENUE AND ACCEPTING TERMS AND CONDITIONS OF THE FUNDING AGRICULTURAL REPLACEMENT MEASURES FOR EMISSION REDUCTION (FARMER) GRANT AWARD, BY THE FOLLOWING VOTE:

AYES: Ashley (*except Item #6*), Benoit, Buscaino, Burke, Cacciotti, Lyou (*except Item #4*), McCallon, Mitchell, Parker, Robinson, Rutherford and Solis

NOES: None

ABSTAIN: Ashley (*Item #6*) and Lyou (*Item #4*)

ABSENT: Nelson

16. Items Deferred from Consent Calendar

2. Set Public Hearing July 6, 2018 to Determine That Proposed Amendments to Rule 1111 – Reduction of NOx Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces are Exempt from CEQA and Amend Rule 1111

The following individuals addressed the Board on Item 2.

Rusty Tharp, Goodman Manufacturing, expressed support for the proposal to include compliant equipment and rebate information in the consumer literature for units. He noted opposition to the labeling requirement, as labels on equipment are rarely read. He added that in-home consultations with consumers provide a better opportunity to provide information about compliant equipment and available rebates. (Submitted Written Comments)

Harvey Eder, Public Solar Power Coalition, noted that the rule amendments should not be exempt from CEQA and that solar power is a better alternative to natural gas.

Mayor McCallon, Chairman Burke and Supervisor Rutherford expressed

support for removing the labeling requirement on units.

Bayron Gilchrist, General Counsel, noted that the current agenda item is only to set the public hearing for July 6, 2018 and discussion on the proposed amendments could occur at the public hearing.

Mayor Benoit noted that the label requirement was discussed at length at the Stationary Source Committee and the committee members agreed that the label does not need to be on the units.

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

AYES: Ashley, Benoit, Burke, Buscaino,
Cacciotti, Lyou, McCallon,
Mitchell, Parker, Robinson,
Rutherford and Solis

NOES: None

ABSENT: Nelson

9. Approve Contract Awards and Modification as Approved by MSRC

Dr. Lyou left the room during the discussion of Item 9.

Mr. Eder urged support for solar-powered electric vehicles which are cost effective and greatly reduce emissions. He expressed concern regarding high CO₂ equivalent levels.

MOVED BY MCCALLON, SECONDED BY
BENOIT, AGENDA ITEM 9 APPROVED, AS
RECOMMENDED, BY THE FOLLOWING
VOTE:

AYES: Ashley, Benoit, Burke, Buscaino,
Cacciotti, McCallon, Mitchell, Parker,
Robinson, Rutherford and Solis

NOES: None

ABSTAIN: Lyou

ABSENT: Nelson

14. Rule and Control Measure Forecast

Dr. Lyou reported that he recently attended a presentation at Garvey Intermediate School in Rosemead where students in a science class used air quality sensors to measure PM levels. The students took measurements at a local restaurant and detected PM levels ten times higher than the ambient air outside of their school and near a freeway. He expressed concerns for both workers and customers of these restaurants. He noted that the AQMP addressed the importance of rulemaking on this issue, adding that restaurant operations are the largest source of directly emitted PM2.5 emissions. He asked staff when PR 1138 regarding the control of emissions from restaurant operations is scheduled to be heard.

Dr. Philip Fine, DEO/Planning, Rule Development and Area Sources, explained that within the AQMP, PR 1138 was scheduled for consideration in 2019. He commented that the high cost of controls has been an impediment due to the number of small establishments that would be impacted. He indicated that the focus has been on bringing the cost of the controls down as well as locating potential funding sources to assist with rule implementation. He added that staff could report to the Stationary Source Committee on the current status of the rule development process.

Mayor Benoit also expressed concern about restaurant operations and reported that he also attended a school presentation where students found high PM levels near a charcoal barbeque that operates daily near their dining area.

Chairman Burke commented that the financial impact for small businesses was minimized when addressing dry cleaning operations many years ago and suggested the possibility of providing funding to restaurant owners to upgrade equipment.

MOVED BY LYOU, SECONDED BY
CACCIOTTI, AGENDA ITEM NO. 14
APPROVED, AS RECOMMENDED, BY THE
FOLLOWING VOTE:

AYES: Ashley, Benoit, Burke, Buscaino,
Cacciotti, Lyou, McCallon,
Mitchell, Parker, Robinson,
Rutherford and Solis

NOES: None

ABSENT: Nelson

PUBLIC HEARING

25. Adopt Executive Officer's FY 2018-19 Proposed Budget

Mr. Nastri explained that the Board previously directed staff to return with proposals to balance the budget.

Sujata Jain, ADEO/Finance, noted that the budget being recommended for adoption includes cost-cutting measures to balance the budget.

The public hearing was opened and the following individual addressed the Board on Item 25.

Mr. Coleman expressed appreciation to staff for addressing the concerns that were raised regarding the fee rule and thanked the Board for maintaining a fiscally responsible budget.

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

Supervisor Rutherford commented on the importance of a balanced budget and asked staff to comment on the viability of operating with the proposed increased staff vacancy rate.

Mr. Nastri explained the challenges the District is facing with recruitment of qualified professional staff as a result of competition between other air districts and CARB, which will be opening a new facility in Riverside in the near future. Filling positions vacated by the retirement of current employees also presents a challenge. He added that the vacancy rate has been increased to nine percent for the FY 2018-19 budget period only and is not intended to be a permanent change.

Dr. Lyou commented that in addition to adding staff to support the implementation of AB 617, the proposed budget includes additional staff positions to support the agency overall.

Chairman Burke commented on the challenge of hiring and retaining qualified employees while the state is facing one of the lowest unemployment rates in 18 years.

MOVED BY BENOIT, SECONDED BY
ROBINSON, AGENDA ITEM 25 APPROVED AS
RECOMMENDED, AS SET FORTH BELOW:

- 1) REMOVE FROM RESERVES AND DESIGNATIONS ALL AMOUNTS ASSOCIATED WITH THE FY 2017-18 BUDGET;
- 2) APPROVE TOTAL APPROPRIATIONS OF \$162,631,101;
- 3) APPROVE REVENUES FOR FY 2018-19 OF \$162,631,101;
- 4) APPROVE THE ADDITION OF 4.4 NET AUTHORIZED/FUNDED POSITIONS AS DETAILED IN THE FY 2018-19 BUDGET;
- 5) APPROVE A PROJECTED JUNE 30, 2019 RESERVES AND DESIGNATIONS FUND BALANCE OF \$15,748,899 AND TOTAL UNDESIGNATED FUND BALANCE OF \$36,939,316;

BY THE FOLLOWING VOTE:

AYES: Ashley, Benoit, Burke, Buscaino, Cacciotti, Lyou, McCallon, Mitchell, Parker, Robinson, Rutherford and Solis

NOES: None

ABSENT: Nelson

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

Henry Vilchik, VGI Furniture, Inc., commented on an asbestos abatement complaint for the property located at 2137 East 55th Street, Vernon, CA. He noted that VGI Furniture was a tenant in the building and ultimately vacated the premises, abandoning their contaminated inventory, after a portion of the roof was removed. He expressed concern that the removal was not done properly and the contaminated furniture was subsequently sold at auction by their former landlord. (Submitted Written Comments)

Dr. Lyou asked if staff has addressed Mr. Vilchik's concerns.

Nicholas Sanchez, Assistant Chief Deputy Counsel, explained that the District has been in communication with the building owner and tenant since September 2016 and the investigation by staff has been completed. He noted that he has been in communication with Mr. Vilchik's attorney regarding an ongoing insurance claim.

Mr. Eder expressed concern about laws that were passed but never published in the California Air Pollution Control Laws.

Florence Gharibian, Del Amo Action Committee, expressed concern about an issue regarding a new warehouse being built in the Del Amo community and suggested that Rule 1466 be applied.

Chairman Burke recommended that Ms. Gharibian provide any relevant correspondence on this matter to Mr. Nastri.

CLOSED SESSION

The Board recessed to closed session at 10:20 a.m., pursuant to Government Code sections:

CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION

- 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:

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).

CONFERENCE WITH LEGAL COUNSEL – INITIATING LITIGATION

- 54956.9(a) and 54956.9(d)(4) to consider initiation of litigation (four cases), including:

State of California and California Air Resources Board, et al. v. United States Environmental Protection Agency and E. Scott Pruitt, U.S. Court of Appeals, D.C. Circuit, Case No. 18-1114.

Following closed session, Mr. Gilchrist 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 Mr. Gilchrist at 11:05 a.m.

The foregoing is a true statement of the proceedings held by the South Coast Air Quality Management District Board on June 1, 2018.

Respectfully Submitted,

Denise Garzaro
Clerk of the Boards

Date Minutes Approved: _____

Dr. William A. Burke, Chairman

ACRONYMS

AQMP = Air Quality Management Plan
CARB = California Air Resources Board
CEQA = California Environmental Quality Act
CO₂ = Carbon Dioxide
DEO = Deputy Executive Officer
FY = Fiscal Year
MSRC = Mobile Source (Air Pollution Reduction) Review Committee
PM = Particulate Matter
PM2.5 = Particulate Matter ≤2.5 microns
PR = Proposed Rule
RFP = Request for Proposals
U.S. EPA = United States Environmental Protection Agency

BOARD MEETING DATE: July 6, 2018

AGENDA NO. 2

PROPOSAL: Approve Memorandum of Agreement Between CARB and SCAQMD to Implement and Enforce Greenhouse Gas Emission Standards for Crude Oil and Natural Gas Facilities and Recognize Revenue

SYNOPSIS: CARB adopted the “Greenhouse Gas Emission Standards for Crude Oil and Natural Gas Facilities (CARB Oil and Gas Regulation),” effective in final form on October 1, 2017. CARB has discretion to enter into an agreement with the SCAQMD to cooperatively implement and enforce the CARB Oil and Gas Regulation. This action is to authorize the Executive Officer to execute a Memorandum of Agreement with CARB to implement and enforce greenhouse gas emission standards for crude oil and natural gas facilities. This action is to also recognize up to \$150,000 in revenue from CARB for FY 2018-19 and \$125,000 per year thereafter.

COMMITTEE: Stationary Source, June 15, 2018, Reviewed

RECOMMENDED ACTIONS:

1. Authorize the Executive Officer to execute the attached Memorandum of Agreement between CARB and the SCAQMD for the implementation and enforcement of greenhouse gas emission standards for crude oil and natural gas facilities.
2. Recognize, upon receipt, up to \$150,000 in revenue from CARB’s Oil and Gas Regulation Grant Funding into the FY 2018-19 General Fund Budget, Miscellaneous Revenue for initial funding and \$125,000 ongoing in subsequent years.

Wayne Natri
Executive Officer

MC:TM:RR:JC

Background

Oil and gas systems are responsible for approximately 15 percent of total methane emissions in California, which is about 18 million metric tons of carbon dioxide equivalent (MMT CO_2e). CARB has implemented regulations controlling methane

emissions from oil and gas systems in response to the mandates of AB 32: the California Global Warming Solutions Act of 2006, SB 32, SB 1383, SB 887, and AB 398.

Pursuant to California Health and Safety Code section 39603, CARB may enter into agreements for services as necessary for the performance of its powers and duties, including powers and duties arising under AB 32 and other greenhouse gas control statutes.

Pursuant to California Health and Safety Code section 40701, the SCAQMD may enter into agreements with a state agency as necessary or proper to accomplish the purposes of Division 26 of the Health and Safety Code. One such purpose is for the SCAQMD to enter into a Memorandum of Agreement (MOA) with CARB in order to coordinate enforcement of CARB's Oil and Natural Gas Regulation.

Many local air districts already regulate oil and gas operations for pollutants other than methane, such as PM2.5, NO_x, and VOC, in order to meet ambient air quality requirements. Additionally, SCAQMD currently issues Title V operating permits to some oil and gas operations regulated under federal rules, including some sources subject to New Source Performance Standards (NSPS) governing VOC and methane emissions. There are approximately 360 crude oil and natural gas facilities currently permitted by the SCAQMD. Of the 360 crude oil and natural gas facilities, 21 are RECLAIM facilities, five are RECLAIM/Title V facilities, and one is a Title V only facility.

The CARB Oil and Gas Regulation builds on equipment and processes already permitted and established by the SCAQMD's current enforcement programs and rules, which have been implemented for decades.

Compliance with the CARB Oil and Gas Regulation will achieve the additional methane reductions needed to comply with California emissions targets and will support compliance with federal programs, especially for new sources.

Proposal

Authorize the Executive Officer to execute the attached MOA between CARB and SCAQMD regarding greenhouse gas emission standards for crude oil and natural gas facilities. In addition, recognize up to \$150,000 in revenue into the FY 2018-19 General Fund Budget and \$125,000 for each subsequent FY.

Resource Impacts

The MOA will be carried out using existing staff resources.

Attachment

Memorandum of Agreement

**MEMORANDUM OF AGREEMENT BETWEEN
THE CALIFORNIA AIR RESOURCES BOARD
AND THE
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
REGARDING IMPLEMENTATION AND ENFORCEMENT OF GREENHOUSE GAS
EMISSION STANDARDS FOR CRUDE OIL AND NATURAL GAS FACILITIES**

1. PARTIES

This Memorandum of Agreement is entered into by and between the California Air Resources Board (“CARB” or “Board”) and the South Coast Air Quality Management District (“District”). CARB and the District are collectively referred to herein as “the Parties.”

2. PURPOSE

- 2.1 The Parties, two government agencies, share a common goal of protecting the People of the State of California through regulation and enforcement of air pollutant emission reduction programs and implementing this task in an efficient manner. By entering into this Memorandum of Agreement (“MOA”) the Parties commit to efficiently pursuing this common goal, considering their respective financial constraints and available resources, and recognizing the very substantial emissions control efforts many districts already have in place at regulated facilities.
- 2.2 Oil and gas systems are responsible for approximately 15 percent of methane emissions in California. CARB has promulgated regulations controlling methane emissions from oil and gas systems in response to the mandates of AB 32, the California Global Warming Solutions Act of 2006,^[1] SB 32 (codifying 2030 greenhouse gas reduction targets), SB 1383^[2] (codifying methane reduction targets and call for a Short-Lived Climate Pollutant Strategy), and SB 887^[3] (mandating leak detection program enhancements at underground natural gas storage facilities), among other authorities. AB 398 (2017), which amended the California Global Warming Solutions Act of 2006, explicitly preserved the districts’ authority to adopt or implement “[a] rule, regulation, standard, or requirement authorized pursuant to a law affecting emissions associated with . . . methane” and reiterated CARB’s authority to “adopt, maintain or revise . . . [m]easures governing methane and fugitive emissions at refineries and oil and gas facilities.”
- 2.3 This MOA is intended to: (1) provide for the coordination of the Parties’ efforts to implement and enforce the Regulation for Greenhouse Gas Emission Standards for Crude Oil and Natural Gas Facilities, as considered by the Board and effective on January 1, 2018 (hereinafter “CARB Oil and Gas Regulation”); (2) create a framework by which CARB and the District can help owners and operators of oil and gas operations meet both local, state and federal requirements; and, (3) further a collaborative model that builds upon the Parties’ extensive implementation and enforcement experience.

^[1] Health & Saf. Code, § 38500, et seq.

^[2] Health & Saf. Code, § 39730, et seq.

^[3] Health & Saf. Code, § 42710, et seq.

- 2.4 Nothing in this MOA shall limit, extend, or otherwise modify the existing authority of the Air Board or the District.

3. BACKGROUND

- 3.1 Powers of CARB. Pursuant to California Health and Safety Code section 39603, CARB may enter into agreements for services as necessary for the performance of its powers and duties, including powers and duties arising under AB 32 and other greenhouse gas control statutes.
- 3.2 Powers of District. Pursuant to California Health and Safety Code section 40701, the District may enter into agreements with a state agency as necessary or proper to accomplish the purposes of Division 26 of the Health and Safety Code. One such purpose is for the District to enter into an MOA with CARB in order to coordinate enforcement of CARB's Oil and Natural Gas Regulation.
- 3.3 Responsibilities under State Law. Under California law, CARB is the state agency charged with monitoring and regulating sources of emissions of greenhouse gases that cause global warming in order to reduce emissions of greenhouse gases (Health and Safety Code § 38510), and CARB is to monitor compliance with and enforce any regulation it adopts pursuant to AB 32 (Health and Safety Code § 38580). CARB is further charged with reducing statewide methane emissions by 40 percent from 2013 levels by 2030. (Health and Safety Code § 39730.5). Pursuant to Health and Safety Code sections 39002 and 40000, districts have primary responsibility for control of air pollution from all sources other than vehicular sources; and, pursuant to Health and Safety Code section 40001, districts shall, subject to the Board's powers and duties, enforce all applicable provisions of state and federal law.
- 3.4 Coordinated Effort. In Health and Safety Code section 39001, the Legislature declares that a coordinated state, regional, and local effort to protect and enhance ambient air quality should be encouraged whenever possible. In Health and Safety Code section 38501, the Legislature stated its intent for the Board to design greenhouse gas emission reduction regulations to complement the state's efforts to improve air quality and to consult with various stakeholders in implementing AB 32.
- 3.5 The Scoping Plan and the Short-Lived Climate Pollutant Reduction Strategy. Pursuant to Health and Safety Code section 38561, the board approved the 2008 Climate Change Scoping Plan, and the First Update to the Climate Change Scoping Plan. Both Plans included the regulation of oil and gas operations. Board Resolution 08-47 adopting the Climate Change Scoping Plan directed CARB's Executive Officer to "design greenhouse gas regulations that affect stationary sources so that they utilize, to the extent practical and appropriate, local air district permitting programs and compliance determination mechanisms." Further, pursuant to Health and Safety Code sections 39730 and 39730.5, CARB has a Short-Lived Climate Pollutant Reduction Strategy, which includes a recommended comprehensive approach to reduce methane from oil and gas systems.

- 3.6 Applicable Federal Law: In 2012 and 2016, pursuant to sections 111(b) and 111(h) of the Clean Air Act, (CAA) the U.S. Environmental Protection Agency (EPA) codified pollution control requirements for the oil and gas production sector in 40 C.F.R. Part 60 Subparts OOOO and OOOOa, which amended existing regulations governing VOC and SO₂ emissions from natural gas processing plants. Subpart OOOO updates the earlier standards for VOC and SO₂ emissions, and establishes VOC standards for oil and natural gas sources not covered by existing regulations. Subpart OOOOa sets standards for both VOC and methane emissions as well as expanding regulatory obligations for new oil and gas sources. Many sources regulated by CARB’s Oil and Gas Rule are also subject to Subparts OOOO and OOOOa. Additionally, EPA has issued Control Technique Guidelines (CTGs) for reducing VOC emissions in existing ozone nonattainment areas, which some districts and CARB will need to address in ozone state implementation plans. Further, while EPA’s current NSPS regulations only apply to new sources, future section 111 regulations may expand to address existing oil and gas operations as well. In 2016, the Bureau of Land Management (BLM) also finalized regulations that limit methane emissions from operations on federal lands primarily to prevent waste, codifying those regulations at 43 C.F.R. Parts 3100, 3160, and 3170.
- 3.7 CARB Oil and Gas Regulation. In implementing its plans and carrying out its responsibilities under state law, the Board has adopted the “Greenhouse Gas Emission Standards for Crude Oil and Natural Gas Facilities,” effective in final form on October 1, 2017. The adopted regulations are set forth at California Code of Regulations, title 17, sections 95665 through 95677, and Appendices A, B, and C thereto.
- 3.7.1 California Code of Regulations, title 17, section 95674 explicitly affirms CARB’s Executive Officer’s discretion to enter into an agreement with any air quality management or air pollution control district (“district”) to cooperatively and jointly implement and enforce the CARB Oil and Gas Regulation.
- 3.7.2 Section 95674 further provides that pursuant to such an agreement, an owner or operator of an oil or gas operation subject to this regulation must pay any fees assessed by the District for the purpose of recovering the District’s cost of implementing and enforcing the CARB Oil and Gas Regulation.
- 3.7.3 Section 95674 further provides that District implementation and enforcement of other law as described in Section 95675 cannot result in a standard, requirement, or prohibition less stringent than provided in the regulation, as determined by CARB’s Executive Officer.
- 3.7.4 CARB Board Resolutions 16-9 and 17-10 express the Board’s understanding that it is appropriate for CARB staff to work with Districts to develop and consider agreements with Districts to implement and enforce the CARB Oil and Gas Regulation.

3.8 Authority to Coordinate Enforcement

3.8.1 CARB Enforcement Authority

- 3.8.1.1 Health and Safety Code section 39515 directs the Board to appoint an Executive Officer, who shall serve at the pleasure of the Board, and provides that the Board may delegate any duty to the Executive Officer that the Board deems appropriate, except that certain statutory reviews by the Executive Officer of district attainment plan activities are subject to the California Administrative Procedure Act, Government Code sections 11340 et seq.
- 3.8.1.2 Health and Safety Code section 39516 provides that any power, duty, purpose, function, or jurisdiction which the Board may lawfully delegate shall be conclusively presumed to have been delegated to the Executive Officer unless it is shown that the Board, by affirmative vote recorded in its minutes, specifically has reserved the same for the Board's own action.
- 3.8.1.3 Resolution 78-10, adopted by the Board on February 23, 1978, identifies powers, duties, purposes, functions and jurisdictions that the Board has specifically reserved unto itself. Regulation 05-40, requires Board approval of certain memoranda of understanding with pollution sources, but not with the air districts.
- 3.8.1.4 Enforcement of CARB regulations is not a power or function that the Board has specifically reserved to itself under Resolution 78-10 or Resolution 05-40 and is therefore conclusively presumed to have been delegated to the CARB Executive Officer.
- 3.8.1.5 In addition to Health and Safety Code Sections 38501, 39001, 39603, 40701, which provide for and authorize joint efforts, case law further establishes that the CARB Executive Officer may delegate the investigation and determination of facts preliminary to agency action. (*California School Employees Assn. v. Personnel Com. of Pajaro Valley Unified School Dist.* (1970) 3 Cal.3d 139.)

3.8.2 District Permitting and Enforcement Authority

- 3.8.2.1 Pursuant to Health and Safety Code section 40001, the District shall enforce rules and regulations, including applicable state and federal law, subject to the powers and duties of the Board.
- 3.8.2.2 Pursuant to Health and Safety Code section 40752, the Air Pollution Control Officer (“APCO”) of each district shall enforce Parts 3 and 4 of Health and Safety Code Division 26 (§§ 40000 - 41357, and 41500 - 41708, respectively) as well as all orders, regulations, and rules prescribed by the district’s governing board. Further, pursuant to Health and Safety Code section 42301, district permit systems allow the districts to ensure

compliance with applicable district and state rules, regulations, and orders.

- 3.8.2.3 Health and Safety Code section 42300 authorizes the districts to require permits prior to construction or operation of articles, machines, equipment or other contrivances that may cause the emission of air contaminants. AB 32 includes methane in its list of pollutants and CARB has identified, through its Scoping Plans, methane control as a key step under AB 32.
- 3.8.2.4 Pursuant to Health and Safety Code sections 38594, 39013, 40702, and 42300, and *Western Oil & Gas Association v. Monterey Bay Air Pollution Control District* (1989) 49 Cal.3d 408, the districts generally have independent authority to adopt, implement, and enforce local rules and regulations that are as stringent or more stringent than those in CARB regulations.
- 3.8.2.5 On [date of adoption], the South Coast Air Quality Management District Board authorized the implementation and enforcement of the CARB Oil and Gas Regulation in the manner described in this MOA.

3.9 Need for Implementation and Enforcement of CARB Regulations

- 3.9.1 Many local air districts already regulate oil and gas operations for pollutants other than methane, such as PM_{2.5}, NO_x, and VOC, in order to meet ambient air quality requirements. Additionally, the Districts, including the South Coast Air Quality Management District, currently issue Title V operating permits to some oil and gas operations regulated under federal rules, including some sources subject to New Source Performance Standards (NSPS) governing VOC and methane emissions (40 CFR 60 Subparts OOOO and OOOOa).
- 3.9.2 The CARB Oil and Gas Regulation builds on equipment and processes already utilized, in many instances, by several of the districts through their current rules, such as leak detection and repair programs, which the districts have been implementing for decades.
- 3.9.3 Compliance with the CARB Oil and Gas Regulation will achieve the additional methane reductions needed to comply with the California AB 32 and SB 32 2020 and 2030 emissions targets, the methane targets codified in SB 1383 and to be implemented by the CARB Short-Lived Climate Pollutant Reduction Strategy, and will support compliance with federal programs.

4. AGREEMENT

4.1 Implementation and Enforcement of the CARB Oil and Gas Regulation

4.1.1 The Parties hereby agree to the following in order to coordinate enforcement efforts and roles, and to authorize the District to exercise certain duties and discretion of the CARB Executive Officer regarding the CARB Oil and Gas Regulation.

4.1.1.1 As set forth in detail below, in implementing and enforcing the CARB Oil and Gas Regulation, the District will perform the functions necessary to determine a source's compliance, including, but not limited to, receiving and reviewing relevant source plans and reports and conducting investigations.

4.1.1.2 The District may perform one or more of the implementation and enforcement tasks identified in this section 4.1 in conjunction with exercising other District powers, including permitting powers, or fulfilling other District responsibilities under federal, state, or local law.

4.1.2 In order to facilitate efficient implementation and enforcement of the Oil and Gas Regulation, CARB has identified provisions for which the District will have primary authority, for purposes of implementation and enforcement, though CARB retains its ultimate authority in all instances. The APCO of a District delegated primary authority over a provision in the Oil and Gas Regulation will serve as the "CARB Executive Officer" as stated in the text of the regulation for purposes of that provision.

4.1.2.1 Except as specified in section 4.1.2.2, the District will serve as the primary authority for enforcement and implementation of the Oil and Gas Regulation.

4.1.2.2 CARB will serve as the primary authority, only for the following provisions of the Oil and Gas Regulation:

- Review of the monitoring plans required by section 95668(h), relating to Natural Gas Underground Storage Facility Monitoring Requirements. CARB will transmit its decisions on these monitoring plans to the District.
- Requirements for owners or operators with regard to well stimulation treatments set forth at section 95668(b). CARB will transmit its determinations regarding these requirements to the District.
- Requirements related to the determination of critical components with regard to facilities and components regulated solely as a result of the Regulation, as set forth in section 95670 of the Regulation.

- Requirements and authorities specifically set forth for CARB in sections 95674 and 95676 of the Regulation.

- 4.1.2.3 Notwithstanding the above, with regard to idle wells, CARB understands that District enforcement and inspection resources are limited. Although the District will make best efforts to address enforcement and compliance issues at idle wells, CARB will also contribute resources and time to ensure these sources are in compliance. In particular, CARB understands that some idle wells may effectively be “orphaned” – that is, due diligence may reveal no party responsible for them. CARB understands that Districts may choose not to focus their limited resources on compliance at these wells in instances where the District has determined that the wells do not appear to pose an immediate risk to health and safety, or to have potential or actual emissions which would compromise the purposes of the Regulation. CARB will work cooperatively with the districts, including via offering available CARB resources, to address issues at these wells in instances where orphaned wells require focused enforcement attention and District resources are not reasonably available. The District will provide a list of any orphaned wells they are aware of to CARB. In areas where either party is designated primary authority, both CARB and the District agree to consult with the other party on an as needed basis.
- 4.1.3 The District will exercise its enforcement discretion, as appropriate, to issue Notices of Violation (NOV) or other citations for violations of any portion of the CARB Oil and Gas Regulation and any amendments thereto.
- 4.1.4 The District will implement and enforce the regulation via the following mechanisms: permitting program to ensure compliance with CARB Oil and Gas Regulation; routine unannounced inspections on both permitted and non-permitted equipment including equipment at natural gas storage facilities with a focus on enforcing a facility’s leak detection and repair programs; and utilization of organic vapor analyzers and optical gas imaging cameras.
- 4.1.5 CARB retains enforcement authority to enforce the CARB Oil and Gas Regulation, and this MOA shall not be interpreted to diminish in any manner CARB authority to enforce its own regulations, either alone or jointly with the District.
- 4.1.6 The District retains enforcement authority to enforce any duly adopted local rules applicable to oil and gas operations, and this MOA shall not be interpreted to diminish in any manner the District’s independent authority to implement and enforce its regulations, either alone or jointly with the CARB.
- 4.1.7 This agreement does not preclude the District from imposing more stringent requirements on oil and gas operations than the CARB Oil and Gas Regulation. Pursuant to section 95676 of this regulation, the CARB retains the authority to

determine whether the District's requirements are more stringent than those imposed by this regulation.

- 4.1.8 Variances from State law are prohibited under Health and Safety Code section 42350. Nothing in this agreement shall be interpreted to allow variances from the CARB Oil and Gas Regulation.

4.2 Standards of Performance

- 4.2.1 When implementing and enforcing the CARB Oil and Gas Regulation, the following standards of performance shall apply:

- 4.2.1.1 The District shall not implement or enforce the CARB Oil and Gas Regulation in a manner less stringent than provided for in the Regulation, as determined by the CARB Executive Officer. Districts may, however, exercise appropriate enforcement discretion. CARB retains its right to enforce the regulation independently as appropriate.

- 4.2.1.2 The District's implementation and enforcement activities pursuant to this MOA shall be carried out by appropriate District staff.

- 4.2.1.3 CARB shall provide the District with periodic training as needed, and will also make the District aware of guidance materials and policies that CARB may issue regarding the CARB Oil and Gas Regulation.

- 4.2.1.4 In the event of a disagreement between the District and a third party regarding the interpretation of this CARB regulation, CARB must be notified by the District in a timely manner and CARB will provide input and assistance in resolving the dispute.

4.3 Information Sharing Processes

- 4.3.1 Information required to be reported by the CARB Oil and Gas Regulation will be gathered and collected as follows.

- 4.3.1.1 CARB will provide information upon request to the District as completely and as expeditiously as is practicable, consistent with relevant law. Owners and operators within the District shall continue to report information to the CARB Executive Officer as required under sections 95668 and 95673. By August 1 of each calendar year, CARB will share with the District information that owners and operators within the District have submitted, as required under sections 95668 and 95673, to CARB. CARB will share information related to flash analysis testing within the District within 10 business days of receipt.

- 4.3.1.2 The registration information required to be submitted by section 95674(b)(2) by January 1 of each calendar year shall be submitted to

CARB by owners and operators. CARB shall then annually transmit this information to the District by February 1 of each calendar year.

- 4.3.1.3 CARB may develop electronic submittal tools to aid in transmission of these reports, and in gathering underlying data.
- 4.3.2 The District will summarize enforcement and implementation data for each year (including, but not limited to, a description of issued NOVs and their resolution, including the amount of any penalties and a description of other required remedies, and the numbers, types, and locations of sources inspected, and any outstanding issues) in a report to CARB by February 1 of the next calendar year. This annual report shall include a list of facilities subject to this CARB regulation that have been inspected by District personnel in the preceding year. The District will make inspection reports for those inspections available to CARB upon request.
- 4.3.3 The District will promptly inform CARB of significant enforcement and implementation matters, and will provide information regarding implementation and enforcement promptly upon CARB request. “Significant” matters include, but are not limited to, violations associated with large emissions releases or risks to the public, patterns of violations or noncompliance regarding a particular owner or operator, disputes over rule interpretation likely to affect implementation or enforcement by CARB or other districts, major settlements, and threatened or actual litigation regarding the regulation. CARB will promptly inform the District of significant implementation and enforcement matters regarding owners, operators, areas, or issues that concern the District.
- 4.3.4 All written correspondence from the District alleging that an administrative or civil penalty will be, or could be, imposed by the District under this MOA shall include the information required by Health and Safety Code section 39619.7(a). The District will provide CARB with copies of each settlement agreement reached by the District for alleged violations of this CARB regulation. All final settlement agreements reached by the District under this MOA shall include the information required by Health and Safety Code section 39619.7(a) and will be published by CARB on CARB’s website (consistent with CARB practices).

4.4 CARB Coordination with the District

- 4.4.1 With advance notice to the District, CARB personnel may accompany District personnel on inspections and other enforcement activities. District personnel may accompany CARB personnel on inspections for purposes of training, ensuring consistency, and joint enforcement.
- 4.4.2 Any District records related to enforcement of the CARB Oil and Gas Regulation shall be provided to CARB upon request. Clearly marked confidential information will be protected from public release by CARB, except after consultation and agreement with the District or under other legal mandate.

- 4.4.3 CARB may periodically review actions taken by the District in implementing and enforcing the CARB Oil and Gas Regulation and provide advice aimed at ensuring consistency between CARB and District enforcement activities.
- 4.4.4 CARB and the District will coordinate to provide assistance to owners and operators seeking to obtain approval from the EPA to use the CARB Oil and Gas Regulation as an Alternative Means of Emissions Limitation (AMEL) to support compliance with 40 CFR Part 60 Subparts OOOO or OOOOa. CARB will also work with the District to support compliance with the CTG issued for the oil and gas sector, and with other federal rulemakings as appropriate.
- 4.4.5 CARB will continue to explore options to assist the District with additional staffing, equipment, funding, and training needs resulting from the Oil and Gas Regulation.
- 4.5 Implementation and Enforcement Coordination
 - 4.5.1 CARB will conduct joint inspections and investigations as requested by the District.
 - 4.5.2 CARB may pursue litigation or settlement using the authority, mechanisms, and remedies available to it under California law.
- 4.6 Civil Penalties. Pursuant to section 95674(a)(1) of the regulation, any penalties secured by the District as a result of an enforcement action that it undertakes to enforce a violation of the CARB Oil and Gas Regulation may be retained by the District. When the District issues a NOV/citation for violation of the CARB Oil and Gas Regulation and refers the violation to CARB for litigation or settlement, any civil penalties for the violation, or payments made in settlement as civil penalties or in lieu thereof obtained by CARB shall be shared equally between the Parties.
- 4.7 Term. This MOA shall be effective upon full execution by both Parties and shall continue in full force and effect unless terminated by either Party pursuant to the terms of the MOA.
- 4.8 Termination. Either Party may terminate this MOA for any reason by providing a written notice of termination no later than 60 days before the date of termination. Each Party's rights and obligations specified in this MOA shall remain in effect until the termination date.
- 4.9 Indemnification. Each Party agrees to indemnify, defend and hold harmless the other party, and the officers, employees, agents and contractors of the other, from and against any claims, liabilities, costs or losses of any kind that arise from, or are alleged to arise from the Party's actions under or the performance of this MOA, except for any such loss, damage, injury or death to the extent caused by the active negligence or other wrongful conduct of the other Party.
- 4.10 Entire Agreement. This MOA represents the entire agreement of the Parties, and merges and supersedes any prior written or oral representations, discussions, understandings or agreements by or between the Parties relating to the subject matter of this MOA.

- 4.11 Modification. No addition to or modification of any term or provision of this MOA will be effective unless set forth in writing and signed by an authorized representative of each of the Parties.
- 4.12 Authority. Each Party represents and warrants that it has the right, power, and authority to execute this MOA. Each Party represents and warrants that it has given any and all notices, and obtained any and all consents, powers and authorities, necessary to permit it, and the persons executing this MOA for it, to enter into this MOA.
- 4.13 Limitations. Except as provided in this MOA, this MOA does not create and shall not be construed to create any right, permission, or requirement for the District to implement or enforce any authority of CARB regarding regulations adopted by CARB pursuant to AB 32.
- 4.14 Third Parties. This MOA shall not be construed to bind any Party in any manner with respect to any person or entity that is not a Party to this MOA, or that is not a successor or assign of a Party.
- 4.15 Notices. Any notice or report required or permitted to be given under this MOA shall be in writing and shall be deemed to be given when served personally, or on the third day after mailing if mailed in the United States mail, postage prepaid, addressed to the address for each Party set forth below:

To CARB: Elizabeth Scheehle
1001 "I" Street
P.O. Box 2815
Sacramento, CA 95812

To District: Marian Coleman
Deputy Executive Officer
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

- 4.16 Severability. If any term of this Agreement is to any extent invalid, illegal, or otherwise incapable of continuing in force, such term shall be excluded to the extent of its invalidity, illegality, or unenforceability; all other terms of this Agreement shall continue in full force and effect and to the extent possible, the severed term shall be deemed to be replaced with a valid and enforceable term that comes closest to achieving the purpose of the severed term until the Parties are able to meet and agree on a replacement term.

IN WITNESS WHEREOF, this MOA has been executed by the parties hereto.

CALIFORNIA AIR RESOURCES BOARD

South Coast Air Quality Management
District.

Richard Corey, Executive Officer

Wayne Nastri, Executive Officer

Date

Date

Approved as to form

Approved as to form

Ellen M. Peter, Chief Counsel

Bayron T. Gilchrist, General Counsel

Date

Date

BOARD MEETING DATE: July 6, 2018

AGENDA NO. 3

PROPOSAL: Recognize Revenue from Participating Members of California Natural Gas Vehicle Partnership, Transfer Funds for SCAQMD's Membership, and Approve Budget and Expenditures for Activities and Projects during FYs 2018-19 and 2019-20

SYNOPSIS: The Board established the California Natural Gas Vehicle Partnership (CNGVP) to promote greater deployment of natural gas vehicles in California. To fund program administration, activities and projects, and achieve the goals of the CNGVP, the Voting Members of the Steering Committee pay dues for a two-year membership while Associate Members participate through in-kind contributions. These actions are to: 1) recognize revenue from participating and future CNGVP Members; 2) transfer \$25,000 from the Clean Fuels Program Fund (31) into the Natural Gas Vehicle Partnership Fund (40) for SCAQMD's two-year membership for FYs 2018-19 and 2019-20; 3) approve the FYs 2018-19 and 2019-20 CNGVP Budget; and 4) authorize the Executive Officer to approve individual expenditures, as approved by the CNGVP, for FYs 2018-19 and 2019-20 up to \$75,000 but not to exceed \$225,000 for each fiscal year.

COMMITTEE: Technology, June 15, 2018; Recommended for Approval

RECOMMENDED ACTIONS:

1. Recognize, upon receipt, up to \$170,000 in membership dues over a two-year period from participating and future members of the CNGVP into the Natural Gas Vehicle Partnership Fund (40);
2. Transfer \$25,000 from the Clean Fuels Program Fund (31) into the Natural Gas Vehicle Partnership Fund (40) for SCAQMD's two-year membership for FYs 2018-19 and 2019-20;
3. Approve the CNGVP budget for FYs 2018-19 and 2019-20, as provided in Table 4; and
4. Authorize the Executive Officer to approve expenditures from the Natural Gas Vehicle Partnership Fund (40) for activities and projects selected by the CNGVP designed to meet partnership goals, as described in this letter and Table 4, for

FYs 2018-19 and 2019-20 in budgeted amounts up to \$75,000 for individual expenditures, contingent upon availability of funds, but not to exceed \$225,000 per fiscal year.

Wayne Natri
Executive Officer

MMM:FM:NB:PMB

Background

In 2002, the Board established the California Natural Gas Vehicle Partnership (CNGVP or the Partnership) to accelerate development of advanced natural gas vehicle technologies, establish a benchmark for lowering emissions from petroleum-based engines, and provide a pathway for transitioning towards fuel cells in the future. The CNGVP is comprised of state and federal air quality agencies, transportation and energy agencies, vehicle and engine manufacturers, fuel providers, transit organizations and refuse haulers.

The Partnership seeks to encourage high-level policymakers from around the nation to share knowledge, plan joint projects and discuss issues such as the role of natural gas to address national energy policies, the potential of natural gas to strengthen national fuel security, and the expansion of engine and vehicle platform development to meet future more stringent engine emissions standards.

Structurally, the Partnership is overseen by a Steering Committee led by a Chair. The Partnership is comprised of Voting Members and Associate Members. All members participate in the activities of the Steering Committee and the working groups created by the Steering Committee. Voting Members make a contribution of \$25,000 for a two-year membership and participate on the Steering Committee and working groups. In addition, private end-users and/or fleet operators may become Voting Members with a minimum contribution of \$10,000. Voting Members make decisions regarding the Partnership's activities and project plans, elections of Chair and Vice-Chair, and budget and expenditures. Each Voting Member has one vote on the Steering Committee. Associate Members do not have membership dues or voting privileges, but participate through in-kind contributions providing valuable assistance in furthering deployment of natural gas vehicles. One environmental organization on behalf of all environmental groups in the Steering Committee will be accepted as a Voting Member without the \$25,000 contribution. The members of the Steering Committee have provided that distinction to CARB.

The Partnership's Steering Committee meets on a periodic basis with high-level representation from each participating member. SCAQMD's representation on the CNGVP includes three Board Members: Mayor Ben Benoit, Dr. Clark E. Parker, Sr., (who has been serving as CNGVP Vice-Chair) and Council Member Dwight Robinson. Routine activities of the Partnership include members and invited guests providing and receiving updates on industry activities, legislative and regulatory activities as well as discussing and planning programs and projects that help promote the Partnership's goals and objectives, which include the use of natural gas as a transportation fuel that can contribute to regional and global air quality issues. An integral part of the Partnership's ability to communicate its message is the CNGVP website (cngvp.org), which is currently maintained under a contract with Gladstein, Neandross & Associates LLC (GNA). The website promotes the activities of the CNGVP and the natural gas vehicle industry in general. The CNGVP also provides sponsorships or cosponsorships for various events, conferences and expositions that advance the use of natural gas as a transportation fuel as well as the development of key documents relative to natural gas vehicles and the role they can play in helping improve air quality.

Over the past two years, individual members of the CNGVP have been active in expanding natural gas refueling infrastructure for California and the rest of the nation, helping to develop near-zero NOx emissions (NZE) heavy-duty natural gas engines that are certified to CARB's most stringent optional low NOx standard of 0.02g NOx/bhp-hr or 90 percent cleaner than the current on-road heavy-duty engine NOx exhaust emissions standard, and advancing the production and deployment of locally produced and consumed renewable natural gas (RNG) that has a significantly lower carbon intensity relative to any fossil-based fuel. In addition, the CNGVP has participated or been involved in the following:

1. Development of a technical white paper exploring the need to deploy zero emissions and NZE heavy-duty vehicle technologies on a wide-scale basis in the U.S., in combination with the use of RNG. The combination can offer an array of environmental and economic benefits, including job creation, improved air quality and a number of environmental waste stream management improvements that will accrue at local levels. The white paper titled "Game Changer – Next Generation Heavy-Duty Natural Gas Engines Fueled by Renewable Natural Gas" (Game Changer) was released on May 3, 2016.
2. Developing communication materials to support and further communicate the key findings of the Game Changer, such as:
 - a. Identifying key facts and metrics into a one page fact sheet,
 - b. Developing a Frequently Asked Question brochure to proactively address the most common questions asked about the Game Changer concept and many points made by NGV industry critics,

- c. Developing a Slide Deck to help industry stakeholders and others communicate the findings,
 - d. Developing Fleet Case Studies that are single page profile pieces that highlight the growing number of progressive fleet operators,
 - e. Developing Infographics for stakeholders for use in their own marketing materials,
 - f. Preparing video scripted for use across a wide range of media platforms and audiences, especially those less aware of the heavy-duty natural gas vehicle industry and RNG,
 - g. Updating the Game Changer website, and
 - h. Adding links on the website to relevant funding programs for the purchase of NZE natural gas vehicles and RNG fueling.
3. Partnering with organizations like the California Natural Gas Vehicle Coalition to conduct a one-day event to bring together stakeholders, policy makers and interested parties at the Ports to provide key findings of the “Game Changer” and to present and discuss opportunities for significant criteria and GHG emissions reductions through widespread and immediate deployment of NZE trucks powered with ultra-low carbon intensity RNG.
 4. Cosponsorships of, and participation at, the 2017 and 2018 Advanced Clean Transportation (ACT) Expo in Long Beach (May 2-5, 2017, and May 1-4, 2018) and the Rethink Methane Symposium in Sacramento (February 21-22, 2017, and February 26-27, 2018).

Proposal

The CNGVP operates on a two-year budget cycle. These actions are to: 1) recognize revenue from participating and future CNGVP Members for FYs 2018-19 and 2019-20; 2) transfer funds from the Clean Fuels Program Fund (31) into the Natural Gas Vehicle Partnership Fund (40) for SCAQMD’s two-year membership for FYs 2018-19 and 2019-20; 3) approve the FYs 2018-19 and 2019-20 CNGVP budget; and 4) authorize the Executive Officer to approve individual expenditures, as approved by the CNGVP for FYs 2018-19 and 2019-20.

During FYs 2016-17 and 2017-18, the CNGVP Steering Committee was comprised of 12 members (Table 1). In April 2018, Westport Innovations, Inc., stated they would no longer be part of the Partnership in deference to Cummins’ participation. Additionally, Kroger Company has not renewed their membership pending further consideration by their sustainability management staff. Table 2 lists the 13 Associate Members consisting of transit districts, public agencies, school districts and environmental organizations as well as the CEC and U.S. EPA.

Table 1. CNGVP Steering Committee Members

Agility Fuel Systems
Clean Energy Fuels
CR&R Inc.*
Cummins Inc.
The Kroger Company*
Sempra Energy Utilities
Trillium CNG
U.S. Department of Energy**
Waste Management, Inc.*
Westport Innovations, Inc.
CARB**
SCAQMD

*Fleet operators/end users (reduced fee)

**Non-paying members

Table 2. CNGVP Associate Members

CEC
City of Los Angeles
Coalition for Clean Air
Colton Unified School District
Foothill Transit
Los Angeles County Metropolitan Transportation Authority
Natural Resources Defense Council
Orange County Transportation Authority
San Joaquin Valley Air Pollution Control District
SunLine Transit Agency
Union of Concerned Scientists
U.S. EPA
University of California Davis

In July 2016, the Board approved the CNGVP’s FYs 2016-17 and 2017-18 Budget. In addition to conference sponsorships, the CNGVP Steering Committee approved an upgrade to their website at a cost not to exceed \$6,800 under a contract with GNA. The cost to maintain the website under another contract with GNA was reduced from \$2,500 per month (July 1, 2016, through March 31, 2017) to \$2,000 per month from April 1, 2017, through March 31, 2018. At its last meeting in April 2018, the CNGVP Steering Committee approved a one-year extension of the website maintenance contract with GNA at the current rate of \$2,000 per month through March 31, 2019. Costs for the website upgrades and maintenance were paid from the Natural Gas Vehicle Partnership Fund (Fund 40). Revenues and expenditures for FYs 2016-17 and 2017-18 are summarized in Table 3.

Table 3. CNGVP Fund Revenues and Expenditures

Revenues (July 2016 – June 2018)	\$633,823
Available Funds (as of July 2016)	\$429,494
Membership Dues Received	\$195,000
Interest Earned	\$9,329
Expenditures (July 2016 – June 2018)	(\$223,689)
Website Upgrade and Maintenance (GNA Contract #12308)	(\$68,300)
Special Consultation & Activity Coordination: Game Changer Communications Tools and Materials	(\$60,000)
Port Event Co-Sponsorship	(\$50,000)
Conference Sponsorships: 2017/18: ACT Expo, Rethink Methane	(\$45,000)
Facility and Meeting Support	(\$389)
Available Fund Balance for FYs 2018-19 and 2019-20	\$410,134

The CNGVP Steering Committee two-year membership dues are currently up for renewal. If all current members renew their memberships, the Natural Gas Vehicle Partnership Fund (40) would be replenished with revenues totaling \$170,000 over the next two years. Projected revenues and proposed expenditures for FYs 2018-19 (July 1, 2018, to June 30, 2019) and 2019-20 (July 1, 2019, to June 30, 2020) are outlined in Table 4, which has been reviewed and approved by the CNGVP Steering Committee Members, pending SCAQMD Board consideration.

Table 4. Proposed FYs 2018-19 and 2019-20 CNGVP Budget

Available Funds for FYs 2018-19 and 2019-20	\$410,134
Anticipated Membership Dues	\$170,000
Total Anticipated Available Funds	\$580,134
<u>Proposed Budget Expenditures</u>	(\$311,000)
Website Maintenance ¹	(\$60,000)
Facility and Meeting Support	(\$1,000)
Special Consultation and Activity Coordination	(\$150,000)
Conference/Exhibition Sponsorships	(\$100,000)
Estimated Unallocated Fund Balance	\$269,134

¹ Includes funding amounts approved through March 31, 2019, of \$24,000, projected amounts through June 30, 2020, of \$30,000 (@\$2,000/month for 15 months), plus contingencies.

For FYs 2018-19 and 2019-20, the CNGVP membership will be directing their efforts toward furthering consumer and public awareness of the benefits of RNG and its use as a transportation fuel in heavy-duty vehicle applications that employ engines certified to CARB's optional low NOx exhaust emissions standard of 0.02g NOx/bhp-hr. These engines are used in many Class 7 and 8 heavy-duty vehicles, particularly in the goods movement, transit and refuse collection services. The CNGVP plans to continue efforts to enhance natural gas and RNG refueling infrastructure in California. Furthermore, the CNGVP plans to continue cosponsoring relevant conferences, identifying projects and studies to further the deployment of next-generation natural gas engines, and advancing the local production and use of RNG as a transportation fuel for both on- and off-road mobile sources.

Benefits to SCAQMD

The implementation of this Partnership has brought public and private stakeholders together to assist in the development and deployment of advanced natural gas vehicles and refueling infrastructure expansion. The CNGVP will continue its leadership role to work with original equipment manufacturers, government and the public towards the advancement of natural gas vehicles in the marketplace to further address criteria pollutant emissions as well as greenhouse gases and energy needs. This will, in turn, increase the natural gas role as a low emissions displacement or augmentation to petroleum fuel where economically feasible. These activities are included in the *Technology Advancement Office Clean Fuels Program 2018 Plan Update* under "Infrastructure and Deployment (NG/RNG)" and "Assess and Support Advanced Technologies and Disseminate Information".

Resource Impacts

The current fund balance totaling \$410,134 plus anticipated membership fees over the next two years of \$170,000 are sufficient to cover projected CNGVP expenditures, budgeted at \$311,000 for FYs 2018-19 and 2019-20. The SCAQMD's two-year membership for FYs 2018-19 and 2019-20 will not exceed \$25,000 from the Clean Fuels Program Fund (31). There are sufficient funds in the Clean Fuels Fund (31) for this membership fee. The Executive Officer will approve individual expenditures, as approved by the CNGVP, for FYs 2018-19 and 2019-20 up to \$75,000 but not to exceed \$225,000 for each fiscal year.

The Clean Fuels Program Fund (31) was 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 the mechanism 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: July 6, 2018

AGENDA NO. 4

PROPOSAL: Recognize and Transfer Revenue and Execute Contract to Develop and Demonstrate Zero Emission Trucks and EV Infrastructure

SYNOPSIS: SCAQMD fosters development and demonstration of zero emission goods movement technologies. Daimler Trucks North America LLC (DTNA) proposes to develop 20 heavy-duty electric trucks with EV infrastructure that includes energy storage systems to demonstrate the trucks in real-world commercial fleet operations in and around environmental justice communities. These actions are to recognize revenue up to \$2,000,000 from the San Pedro Bay Ports and \$500,000 from U.S. EPA and transfer up to \$4,440,000 from the State Emissions Mitigation Fund (39) and \$11,230,072 from the Clean Fuels Program Fund (31) into the Advanced Technology Goods Movement Fund (61). Of the \$11,230,072, up to \$2,500,000 is for a temporary loan pending receipt of the cofunding and \$8,730,072 is for SCAQMD's cost-share for the project. Staff is actively seeking additional cofunding; if realized, SCAQMD's cost-share may decrease, subject to Board consideration. This action is to also execute a contract with DTNA to develop and demonstrate 20 heavy-duty electric trucks and EV infrastructure in an amount not to exceed \$15,670,072 from the Advanced Technology Goods Movement Fund (61).

COMMITTEE: Technology, June 15, 2018; Recommended for Approval

RECOMMENDED ACTIONS:

1. Recognize, upon receipt, up to \$2,000,000 from the San Pedro Bay Ports into the Advanced Technology Goods Movement Fund (61) to develop and demonstrate zero emission trucks and EV infrastructure;
2. Recognize, upon receipt, up to \$500,000 from U.S. EPA FY18 Section 105 Clean Air Technology Initiative funding into the Advanced Technology Goods Movement Fund (61) to develop and demonstrate zero emission trucks and EV infrastructure;

3. Transfer up to \$4,440,000 from the State Emissions Mitigation Fund (39) into the Advanced Technology Goods Movement Fund (61) to develop and demonstrate zero emission trucks and EV infrastructure;
4. Transfer \$8,730,072 from the Clean Fuels Program Fund (31) into the Advanced Technology Goods Movement Fund (61) for SCAQMD's project cost-share;
5. If needed, transfer up to \$2,500,000 as a temporary loan from the Clean Fuels Program Fund (31), pending receipt of cofunding;
6. Transfer any unspent funds from the Advanced Technology Goods Movement Fund (61) to the Clean Fuels Program Fund (31) upon project completion; and
7. Authorize the Chairman to execute a contract with Daimler Trucks North America LLC to develop and demonstrate up to 20 heavy-duty electric trucks and EV infrastructure in an amount not to exceed \$15,670,072 from the Advanced Technology Goods Movement Fund (61).

Wayne Natri
Executive Officer

MMM:FM:NB:JI

Background

The SCAQMD is committed to achieving healthful air in the South Coast Air Basin (Basin) and all areas within the SCAQMD's jurisdiction. The 2016 AQMP seeks to achieve and maintain all state and federal air quality standards within attainment deadlines by the earliest date achievable to comply with federal Clean Air Act requirements. In order to meet these goals, the 2016 AQMP includes an integrated control strategy addressing multiple objectives for a more efficient path in meeting all clean air standards. Demonstration and commercialization projects will be crucial to help deploy and reduce costs for zero emission technologies. A key element of the implementation strategy is to engage original equipment manufacturers (OEMs) in the development and demonstration of zero emission technologies. The OEMs have the ability to design, develop, manufacture, market and service large volumes of vehicles which are needed in the Basin to get the emission reductions to meet air quality goals in the region.

There has been an increased interest in the marketplace for zero emission trucks including battery-electric technology in the heavy-duty goods movement sector, and the adoption of the San Pedro Bay Ports' Clean Air Action Plan has further stimulated this interest among fleets and others. While the benefits of electric drive vehicles are widely accepted, the cost of the technology and the availability of charging assets needs to be carefully considered and planned for implementing new technology programs. Additionally, OEMs are in desperate need of operational data and available vehicles to

provide this data. Daimler Trucks North America LLC (DTNA), the world's leader in heavy-duty truck sales, proposes to implement the Daimler Zero Emission Trucks and EV Infrastructure Project.

Proposal

Under the Daimler Zero Emission Trucks and EV Infrastructure Project, DTNA will develop battery-electric heavy-duty trucks and demonstrate them in real-world commercial fleet operations in and around environmental justice communities within the SCAQMD's jurisdiction to gather data and information from the end-users including performance under specific duty-cycle applications. DTNA will utilize the data and information to move toward the commercial production and sales phase. DTNA will supply ten Class 6 trucks with a gross vehicle weight rating (GVWR) up to 26,000 pounds and ten Class 8 trucks with a GVWR up to 80,000 pounds, including associated EV charging infrastructure. Fleet partners will be identified and the trucks integrated into a range of services and applications to gather operational data to improve each charging and utilization scheme, with seven of the Class 8 trucks to be used in port drayage operations, supporting the goods movement industry.

The drivetrain of the Class 6 electric trucks is capable of delivering over 220 horsepower, and the design allows for a burdened load with GVWR up to 26,000 pounds. Each charge of the battery can give operators 150-200 miles of service range, and the medium-duty design comes with a 4x2 axle configuration with a day cab of 106 inches. The batteries that come equipped with the Class 6 truck design will have a capacity of 225-300 kilowatt hours (kWh). The truck is capable of being charged with a Combined Charging Standard Type 1 (CCS T1).

The Class 8 truck model will be designed to have a range of 150-200 miles between charging. The electric drivetrain is capable of delivering over 455 horsepower and is designed to meet the needs and specifications of transportation of a GVWR of up to 80,000 pounds. The vehicles will have a 6x4 axle configuration with a 116-inch day cab, and the battery system will provide 400-600 kWh of usable power. The Class 8 vehicles will also use the CCS T1 charging systems.

DTNA will install DC fast charger stalls at four fleet locations providing an adequate number of chargers to support their fleet of 20 trucks. Each fast charger will be equipped with an SAE J1772 Combo (CCS T1) interface and will be capable of charging at up to 160 kW. The chargers will also be connected remotely for troubleshooting, management and data collection. Each DC fast charger will be paired with multiple battery energy storage systems (ESS) to optimize utility costs and reduce infrastructure enhancements required to support the chargers. DTNA will deploy the battery-based ESS paired with each high power vehicle charger. The proposed chargers will allow an 80% state of charge for the Class 6 trucks in two hours and the Class 8 trucks in three hours. Deploying two chargers per site will result in potential peak

power demands of approximately 335 kW. The ESS will be comprised of two or more modular units paired with a single charger. Each unit will be capable of delivering 60-70 kW at 480 volts AC power and will store 110-120 kWh of energy. Utilizing grid-aware scheduling algorithms, the ESS will charge from the grid during low-cost periods and over extended periods of time. This allows the ESS to recharge from the grid at a much lower peak power demand, reducing utility and facility infrastructure requirements and reducing or eliminating utility demand charges.

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. The request for a sole source award for this project is made under provision B.2.d.(1): Projects involving cost-sharing by multiple sponsors. This development and demonstration project will be cost-shared by the Ports, EPA Region 9 and DTNA, with additional cofunding actively being sought. In addition, Section VIII.B.3 identifies provisions under which a sole source award may be justified when contracts are funded in whole or in part with federal funds. This request for sole source award is made under provision B.3.c., which states the awarding federal agency authorizes noncompetitive proposals.

Benefits to SCAQMD

SCAQMD's Clean Fuels Program supports development and demonstration of zero emission electric transportation powered by batteries for goods movement technologies. The SCAQMD has also supported a number of activities directed toward the commercialization of electric vehicles and associated infrastructure. This proposed project is included in the *Technology Advancement Office Clean Fuels Program 2018 Plan Update* under "Develop and Demonstrate Electric and Hybrid Vehicles" and "Develop and Demonstrate EV Infrastructure for Deployment of Plug-In Electric and Hybrid Electric Vehicles."

Resource Impacts

The total cost for the Daimler Zero Emission Trucks and EV Infrastructure Project will not exceed \$31,340,144. DTNA will contribute \$15,670,072. A transfer of \$4,440,000 will be made from the State Emissions Mitigation Fund (39) to the Advanced Technology Goods Movement Fund (61) for this project, and SCAQMD's contract with DTNA will not exceed \$15,670,072 from the Advanced Technology Goods Movement Fund (61). The revenue from the San Pedro Bay Ports and U.S. EPA FY18 Section 105 Clean Air Technology Initiative will be used to cofund the project in the amount of \$2,000,000 and \$500,000, respectively, although additional cofunding is actively being sought. SCAQMD's cost-share will not exceed \$8,730,072 from the Clean Fuels Program Fund (31), but may decrease if additional cofunding is realized. A temporary loan of up to \$2,500,000 will be made from the Clean Fuels Program Fund (31) to the Advanced Technology Goods Movement Fund (61), pending receipt of cofunding. Any

unspent funds will be transferred back to the Clean Fuels Program Fund (31) after project completion.

The funding sources and partners for this project are identified in the following table.

Funding Source	Amount	Percent
DTNA	\$15,670,072	50
State Emissions Mitigation Fund (39)	\$4,440,000	14
San Pedro Bay Ports*	\$2,000,000	6
U.S. EPA Region 9	\$500,000	2
SCAQMD (<i>Requested</i>)	\$8,730,072	28
Total	\$31,340,144	100

**pending funding approval by Harbor Commissions*

Sufficient funds are available in the Clean Fuels Program Fund (31). The Clean Fuels Fund was 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.

The State Emissions Mitigation Fund (39) was established during FY 2002 to account for funds received from CARB to fund selected projects on emission reductions within the South Coast Air Basin. This was in response to the Governor’s statewide program to mitigate excess emissions from peaker power generation units to alleviate the power crisis in California. In January 2018, the Board approved the allocation of \$4,440,000 for mobile source emission reduction projects and supporting infrastructure from the State Emissions Mitigation Fund (39). The proposed mobile source emission reduction and infrastructure project has been selected to utilize these funds.

The Advanced Technology Goods Movement Fund (61) was established to facilitate the development and deployment of low and zero emission goods movement technologies. With the transfers from Funds 31 and 39, there will be sufficient funds for the proposed project with DTNA.

BOARD MEETING DATE: July 6, 2018

AGENDA NO. 5

PROPOSAL: Execute and Amend Contracts for Technical Assistance for Advanced, Low and Zero Emissions Mobile and Stationary Source Technologies and Implementation of Incentive Programs

SYNOPSIS: On February 2, 2018, the Board approved the release of an RFQ to solicit proposals to provide technical assistance, implementation and outreach support for advanced, low and zero emissions technologies for the Clean Fuels Program and various incentive funding programs. Sixteen proposals were received in response to the solicitation. These actions are to execute or amend contracts with 11 technical experts to provide technical assistance and outreach support in an amount not to exceed \$2,810,000, comprised of \$810,000 from the Clean Fuels Program Fund (31), \$450,000 from the Carl Moyer Program AB 923 Fund (80), \$375,000 from the Community Air Protection AB 134 Fund (77) and \$1,175,000 from the HEROS II Special Revenue Fund (56). Funding from the Carl Moyer AB 923, AB 134 and HEROS II special revenue funds will be from the administrative portion of those funds.

COMMITTEE: Technology, June 15, 2018; Recommended for Approval

RECOMMENDED ACTIONS:

1. Authorize the Chairman to execute the following contracts in an amount not to exceed \$810,000 from the Clean Fuels Program Fund (31):
 - a) AEE Solutions LLC for technical assistance with heavy-duty vehicle emissions testing, analyses and engines development and applications in an amount not to exceed \$100,000;
 - b) CALSTART, Inc., for deployment and demonstration of infrastructure and mobile source applications in an amount not to exceed \$150,000;
 - c) Clean Fuel Connection, Inc., (CFCI) for technical assistance with alternative fuels, electric vehicles, charging and fueling infrastructure and renewable energy in an amount not to exceed \$100,000;
 - d) Eastern Research Group for technical assistance with heavy-duty vehicle emissions testing, analyses and engines development and applications in an amount not to exceed \$50,000;

- e) Gladstein, Neandross & Associates LLC (GNA) for technical assistance with alternative fuels and fueling infrastructure, emissions analysis and on-road sources in an amount not to exceed \$200,000;
 - f) Hydrogen Ventures for assistance with hydrogen infrastructure projects in an amount not to exceed \$50,000;
 - g) TechCompass for assistance with evaluation of combustion engines and alternative fuel technologies in an amount not to exceed \$10,000; and
 - h) University of California Riverside (UCR) for technical assistance with heavy-duty vehicle emissions testing, analyses and engines development and applications in an amount not to exceed \$150,000.
2. Authorize the Chairman to execute the following contracts for proposal evaluations and implementation of the Carl Moyer Program (including the School Bus Program) in an amount not to exceed \$450,000 from the administrative portion of the Carl Moyer Program AB 923 Fund (80):
- a) CALSTART, Inc., in an amount not to exceed \$150,000; and
 - b) CFCI in an amount not to exceed \$300,000.
3. Authorize the Chairman to execute the following contracts for outreach support, proposal evaluations, grant management systems and implementation of the Carl Moyer-Community Air Protection Program for a total of \$375,000 from the administrative portion of the Community Air Protection AB 134 Fund (77):
- a) CFCI in an amount not to exceed \$175,000;
 - b) GNA in an amount not to exceed \$100,000;
 - c) Liberty Hill Foundation in an amount not to exceed \$25,000; and
 - d) Sonoma Technology, Inc., in an amount not to exceed \$75,000.
4. Authorize the Chairman to execute or amend the following contracts for technical assistance, implementation and outreach support of the Enhanced Fleet Modernization Program in an amount not to exceed \$1,175,000 from the administrative portion of the HEROS II Special Revenue Fund (56):
- a) A contract amendment with CFCI in an amount not to exceed \$500,000;
 - b) A contract amendment with the Foundation for California Community Colleges (FCCC) in an amount not to exceed \$650,000; and
 - c) A contract with Liberty Hill Foundation in an amount not to exceed \$25,000.

Wayne Nastri
Executive Officer

MMM:FM

Background

The AQMP is the comprehensive regional plan for attaining federal air quality standards in the South Coast Air Basin. In addition to full implementation of current technologies and control methods, there is a need to further develop and promote technological breakthroughs. Air quality projections indicate that the federal standards for PM_{2.5} and ozone are not expected to be met without aggressive implementation of commercial technologies and accelerated development of new technologies.

The Technology Advancement Office (TAO) administers two programs to accomplish these goals. The Clean Fuels Program supports projects to research, develop, demonstrate and deploy technologies to accelerate commercialization of clean, new technologies. The Carl Moyer, Proposition 1B-Goods Movement, Lower-Emission School Bus, Enhanced Fleet Modernization Programs and other similar programs provide incentive funding to end-users to implement the cleanest available technologies for various light-duty vehicles, and heavy-duty on- and off-road applications. Due to constant and rapid changes in technologies and the sheer breadth of the potential projects, staff occasionally requires input from experts and in-the-field practitioners to aid in selecting and establishing projects for the Clean Fuels Program and to implement various incentive programs.

On February 2, 2018, the Board approved RFQ #Q2018-12 to solicit proposals for technical assistance for the Clean Fuels Program and implementation of various incentive funding programs. The RFQ solicited statements of qualifications from individuals and organizations potentially capable of providing technical assistance in a variety of areas to support staff activities. The RFQ sought companies or individuals to provide assistance in assessment of zero emissions and goods movement technologies; technical assistance for feasibility studies of stationary and mobile emissions control technologies; emissions assessment of new alternative fuel technologies; evaluation of innovative emissions control systems; assessment of economic, regulatory and technical barriers to the commercialization of clean fuels and advanced technologies; and to implement various incentive programs.

Outreach

In accordance with SCAQMD's Procurement Policy and Procedure, a public notice advertising the RFQ 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 RFQ 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 Evaluation

Sixteen proposals were received in response to RFQ #Q2018-12. The proposals were evaluated and scored by a three-member panel in accordance with established SCAQMD guidelines. The panel consisted of one Assistant Deputy Executive Officer, one Technology Demonstration Manager and one Technology Implementation Manager. The panel breakdown was as follows: two males and one female; two Caucasians and one Asian Pacific Islander. The panel scores are shown in Table 1 of the attachment. Based on these scores and current needs, staff is recommending funding levels for each of the proposers as shown in Table 2 of the attachment. The technical expertise of five proposers - Fossil Energy Research Corporation, Oji Environmental Services, Energy Solutions, Norton Engineering, Energetics, Inc., - did not match the specific objectives and needs of the SCAQMD's demonstration and implementation programs at this time and are therefore not recommended for awards.

Proposal

This action is to execute level-of-effort contracts as follows:

AEE Solutions LLC will provide technical assistance with heavy-duty vehicles emissions testing, analyses and engine development and applications in an amount not to exceed \$100,000 from the Clean Fuels Program Fund (31). The team at AEE Solutions LLC has professional experience and proven expertise in the areas of alternative fuels, low and zero emissions technologies, emissions controls, federal policies and state regulations.

CALSTART, Inc., will provide assistance with deployment and demonstration of infrastructure and mobile source applications in an amount not to exceed \$300,000, comprised of \$150,000 from the Clean Fuels Program Fund (31) and \$150,000 from the Carl Moyer Program AB 923 Fund (80). The team at CALSTART has professional experience and expertise in the areas of infrastructure development, zero emission buses, near-zero emission medium- and heavy-duty vehicles and strategies for zero and near-zero market expansion. They have been assisting CARB in the implementation of HVIP during the past several years.

Clean Fuel Connection, Inc., (CFCI) will provide technical assistance with alternative fuels, electric vehicles, charging and fueling infrastructure and renewable energy as well as technical assistance on continued implementation and reporting for the Carl Moyer Program, including the School Bus and the Carl Moyer-Community Air Protection Programs, and the Enhanced Fleet Modernization Program (EFMP) in an amount not to exceed \$1,075,000, comprised of \$100,000 from the Clean Fuels Program Fund (31), \$300,000 from the Carl Moyer Program AB 923 Fund (80), \$175,000 from the Community Air Protection AB 134 Fund (77) and \$500,000 from the HEROS II Special Revenue Fund (56). Ms. Enid Joffe (principal) has more than 15 years of experience with low and zero emissions technologies, electric vehicles and charging infrastructure and renewable energy.

Eastern Research Group will provide technical assistance with vehicles emissions testing, analyses and engine development and applications in an amount not to exceed \$50,000 from the Clean Fuels Program Fund (31). The group at Eastern Research Group has experience and capabilities in conducting both dynamometer and in-use emissions measurements.

Foundation for California Community Colleges (FCCC) has successfully provided assistance for the implementation of the EFMP program by providing case management and outreach support since its inception. FCCC will continue to provide assistance for the implementation of this program in an amount not to exceed \$650,000 from the HEROS II Special Revenue Fund (56).

Gladstein, Neandross & Associates LLC (GNA) will provide technical expertise with alternative fuels and fueling infrastructure, emissions analysis, on-road sources and outreach activities in an amount not to exceed \$300,000, comprised of \$200,000 from the Clean Fuels Program Fund (31) and \$100,000 from the Community Air Protection AB 134 Fund (77). GNA has partnered with energy, transit, waste management and goods movement companies to develop projects such as the use of LNG in cargo handling equipment at the Ports of Los Angeles and Long Beach, evaluation of the feasibility of utilizing LNG in the Ports' yard equipment and the development of strategies to reduce emissions from construction and operations of the proposed LNG import terminal.

Hydrogen Ventures will provide assistance with hydrogen infrastructure and related projects in an amount not to exceed \$50,000 from the Clean Fuels Program Fund (31). The team at Hydrogen Ventures has conducted several studies on viability of hydrogen technology and fueling.

Liberty Hill Foundation, a nonprofit organization, will provide assistance with SCAQMD outreach efforts in disadvantaged and low-income communities for the implementation of incentive funding programs in those areas in an amount not to exceed \$50,000, comprised of \$25,000 from the Community Air Protection AB 134 Fund (77) and \$25,000 from the HEROS II Special Revenue Fund (56). Liberty Hill Foundation has considerable experience in identifying and reaching out to disadvantage communities for various types of projects.

Sonoma Technology, Inc., will provide assistance with the identification, evaluation and development of grant management systems, including web-based and mobile applications as appropriate, for program management and reporting for the Carl Moyer Program in an amount not to exceed \$75,000 from the Community Air Protection AB 134 Fund (77). Sonoma Technology has an experienced staff with expertise in implementation of web-based and mobile application systems.

TechCompass will provide assistance with evaluation of combustion engines and alternative fuel technologies in an amount not to exceed \$10,000 from the Clean Fuels Program Fund (31). Mr. Andy Abele (principal) has more than 20 years of experience with research and development in combustion technology projects.

University of California Riverside (UCR) will provide technical assistance with heavy-duty vehicle emissions testing, analyses and engine development and applications in an amount not to exceed \$150,000 from the Clean Fuels Program Fund (31). The team at the UCR has professional experience and proven expertise in the areas of alternative fuels, low and zero emissions technologies, emissions testing, and federal policies and state regulations.

Benefits to SCAQMD

The proposed awards will support the implementation of Clean Fuels, Carl Moyer and EFMP Programs. In addition, outside expertise will provide an effective means of evaluating new technologies and assessing emissions reductions.

Resource Impacts

Total amount of awards will not exceed \$2,810,000, comprised of \$810,000 from the Clean Fuels Program Fund (31), \$450,000 from the Carl Moyer Program AB 923 Fund (80), \$375,000 from the Community Air Protection AB 134 Fund (77) and \$1,175,000 from the HEROS II Special Revenue Fund (56).

Sufficient funds are available from the Clean Fuels Program Fund, established as a special revenue fund resulting from the state-mandated Clean Fuels Program to cover the proposed \$540,000 for outside technical assistance. 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.

Funding from the Carl Moyer, the Community Air Protection AB 134, and the EFMP funds will be from the administrative portion of those funds.

Attachments

Table 1 – Average Scores for Proposers

Table 2 – Proposed Awards

Table 1. Average Scores for Proposers

Proposer	Technical Points	Labor Rates	Additional Points*	Total Points
AEE Solutions LLC	59	30	0	89
CALSTART, Inc.	60	28	5	93
CFCI	57	28	15	100
Eastern Research Group	58	28	0	86
FCCC	58	30	0	88
GNA	68	20	15	103
Hydrogen Ventures	63	20	15	98
Liberty Hill Foundation	56	25	7	88
Sonoma Technology, Inc	56	25	12	93
TechCompass	58	28	15	101
UCR	66	25	0	91

* The additional points were 10 points each for small business and DVBE, 7 points for use of DVBE subcontractors, 5 points each for low emission vehicle business and local business, and 2 points each for off-peak hours delivery business and most favored customer. The maximum additional points could not exceed 15 points.

Table 2. Proposed Awards

Proposer	Clean Fuels Program Fund (31)	Carl Moyer Program (incl. School Bus & VIP) AB 923 Fund (80)	Community Air Protection AB 134 Fund (77)	HEROS II Special Revenue Fund (56)	Total
AEE Solutions LLC	\$100,000				\$100,000
CALSTART, Inc.	\$150,000	\$150,000			\$300,000
CFCI	\$100,000	\$300,000	\$175,000	\$500,000	\$1,075,000
Eastern Research Group	\$50,000				\$50,000
FCCC				\$650,000	\$650,000
GNA	\$200,000		\$100,000		\$300,000
Hydrogen Ventures	\$50,000				\$50,000
Liberty Hill Foundation			\$25,000	\$25,000	\$50,000
Sonoma Technology, Inc.			\$75,000		\$75,000
TechCompass	\$10,000				\$10,000
UCR	\$150,000				\$150,000
Total	\$810,000	\$450,000	\$375,000	\$1,175,000	\$2,810,000

BOARD MEETING DATE: July 6, 2018

AGENDA NO. 6

PROPOSAL: Recognize Revenue and Transfer and Appropriate Funds for Air Monitoring Programs, and Issue Solicitations and Purchase Orders for Air Monitoring and Laboratory Equipment Plus One Vehicle

SYNOPSIS: SCAQMD has applied for U.S. Government Enhanced Particulate Monitoring Program grant funds for FY 2018-19 and, based on the estimate included in the FY 2018-19 Budget, is asking the Board to recognize additional revenue in anticipation of the FY 2018-19 grant award. In addition, U.S. EPA is expected to award up to \$238,502 for the NATTS Program for FY 2018-19. These actions are to recognize revenue and appropriate funds for the Enhanced Particulate Monitoring and NATTS Programs and remaining balances of the PAMS, Near-Road NO₂ and Community Scale Air Toxics Programs; transfer and appropriate funding for the remaining balance of the Community Air Toxics Initiative Program, funded by the BP ARCO Settlement Projects Fund (46); and issue solicitations and purchase orders for air monitoring and laboratory equipment plus one vehicle.

COMMITTEE: Administrative, June 8, 2018; Recommended for Approval

RECOMMENDED ACTIONS:

1. Recognize federal revenue up to \$1,508,619 and appropriate funds up to \$891,889, upon receipt, into the FY 2018-19 Budget as set forth in Attachment 1 (and further detailed in Attachments 2-6).
2. Issue solicitations and authorize the Executive Officer or Procurement Manager, in accordance with SCAQMD Procurement Policy and Procedure, to issue purchase orders for the following (and as listed in Table 1):
 - a) One vehicle in an amount not to exceed \$40,000;
 - b) Up to four NO₂ monitors in an amount not to exceed \$50,000;
 - c) One Direct (True) NO₂ monitor based on Cavity Attenuated Phase Shift technology in an amount not to exceed \$20,000; and
 - d) Two PM₁₀ samplers in an amount not to exceed \$19,000.

3. Transfer and appropriate up to \$115,100 from the BP ARCO Settlement Projects Fund (46) to Science & Technology Advancement's FYs 2018-19 and/or 2019-20 Budget, Services & Supplies and/or Capital Outlays Major Objects, for up to 25 integrated filter-based samplers (as listed in Table 2).
4. Issue solicitation(s) and authorize the Executive Officer or Procurement Manager, in accordance with SCAQMD Procurement Policy and Procedure, to issue a purchase order(s) for up to 25 integrated filter-based samplers in an amount not to exceed \$115,100 from Science & Technology Advancement's FY 2018-19 and/or 2019-20 Budget.

Wayne Nastri
Executive Officer

MMM:JCL:AP:AK:KD

Background

Enhanced Particulate Monitoring Program

SCAQMD has been providing enhanced particulate monitoring support as part of a national monitoring program since 2003. Sample collection began in early February 2003 and will continue for the foreseeable future.

NATTS Program

There are currently 188 hazardous air pollutants (HAPs) or air toxics regulated under the Clean Air Act that are associated with a wide variety of adverse health effects, including cancer and neurological effects. U.S. EPA Government Performance Results Act commitments specify a goal of reducing air toxic emissions by 75% from 1993 levels to significantly reduce health risks. The NATTS Program was developed to fulfill the need for long-term national HAP monitoring data. In 2007, U.S. EPA expanded the NATTS Program and awarded Section 103 funds to conduct monitoring for toxic air contaminants at two existing SCAQMD monitoring sites, Central Los Angeles and Rubidoux. The air toxics data serves as a continuum between past and future air toxic measurement programs, such as MATES, and allows for more accurate evaluation of toxic trends on a regional basis.

PAMS Program

In February 1993, U.S. EPA promulgated the PAMS regulations for areas classified as serious, severe or extreme non-attainment for ozone. These regulations require SCAQMD to conduct monitoring for ozone precursors with enhanced monitoring equipment at multiple sites. The PAMS Program is also funding the meteorological upper air profilers sited at LAX and Ontario airports, Moreno Valley, Irvine and Whiteman Airport in the San Fernando Valley. Since the onset of the PAMS Program, U.S. EPA has annually allocated Section 105 supplemental grant funds in support of this requirement.

In 2011, U.S. EPA along with local and state agencies evaluated the PAMS network and recommended changes to regulations published on October 1, 2015, as part of the Ozone National Ambient Air Quality Standards (NAAQS) review. Changes to requirements include co-locating PAMS sites with existing National Core (NCore) sites, development of enhanced monitoring plans (EMPs) for non-attainment areas, hourly VOC measurements using auto-gas chromatographs, direct nitrogen dioxide (NO₂) measurements and monitoring of multiple meteorological parameters including mixing height. PAMS monitoring at NCore sites is required by June 1, 2019, and EMPs are required by October 1, 2019. SCAQMD intends to be an early adopter at one site of required changes and implement the changes including hourly VOC, direct NO₂ and enhanced meteorological measurements in advance of the 2019 deadline. U.S. EPA has already provided funding of \$200,000 for this effort.

Near-Road NO₂ Monitoring Program

On February 9, 2010, U.S. EPA promulgated new monitoring requirements for the NO₂ monitoring network in support of newly revised 1-hour NO₂ NAAQS and the retained annual NAAQS. The new monitoring requirements stipulated that state and local air monitoring agencies were required to install near-road NO₂ monitoring stations at locations where peak hourly NO₂ concentrations are expected to occur as well as to consider traffic volumes, fleet mix, roadway design, traffic congestion patterns, local terrain or topography, and meteorology in determining where a required near-road NO₂ monitor should be placed. In addition to those required considerations, there are other factors that impact the selection and implementation of a near-road monitoring station including satisfying siting criteria, site logistics and population exposure. SCAQMD's current near-road NO₂ monitoring network consists of four sites (Anaheim, Long Beach Route 710, Ontario Etiwanda and Ontario Route 60), which were implemented in January 2014 and 2015.

Community Scale Air Toxics Monitoring

On November 7, 2014, U.S. EPA released RFP #EPA-OAR-OAQPS-15-01 to announce the availability of funds for "Community-Scale Air Toxics Ambient Monitoring" projects. Specifically, the RFP solicited proposals for projects designed to assist state, local and tribal communities in identifying and profiling air toxics sources, assessing emerging measurement methods, characterizing the degree and extent of local-scale air toxics problems and tracking progress of air toxics reduction activities. To be considered for funding under this RFP, each project had to address only one of the following four categories: community-scale monitoring, monitoring in the near-road environment, methods evaluation; or analysis of existing data. SCAQMD staff submitted a grant proposal to U.S. EPA within the community-scale monitoring category requesting funding in the amount of \$569,682. On June 25, 2015, U.S. EPA informed staff that the SCAQMD proposal was selected for award based on its score, rank and technical merit. Since that time, staff has been conducting monitoring activities in communities near refineries and other potential sources of air toxics using optical remote sensing and other advanced air monitoring technology.

Community Air Toxics Initiative (CATI) Program

On October 6, 2017, the Board approved the transfer and appropriation of up to \$150,000 to Science & Technology Advancement's FYs 2017-18 and/or 2018-19 Budget, Services and Supplies Major Object (Small Tools, Instruments, Equipment Account), from the BP ARCO Settlement Projects Fund (46). This action was to purchase integrated samplers for deployment on light or electrical poles to keep pace with the increasing demand for more extensive metal monitoring in Paramount and Compton and the projected expansion of current monitoring and analysis activities in other parts of the Basin. Seven portable Omni samplers manufactured by BGI, Inc., were acquired for this purpose and \$115,100 is still available for the purchase of additional samplers.

Proposal

The federal revenue to be recognized, funds to be transferred and FY 2018-19 appropriations are summarized in Attachment 1. Specific details are below (and in Attachments 2-6).

Enhanced Particulate Monitoring Program (FY 2018-19)

The SCAQMD is expected to receive funding from the U.S. Government for the ongoing Enhanced Particulate Monitoring Program for FY 2018-19 in an amount up to \$2,100,000. This action is to recognize, upon receipt, additional revenue up to \$1,050,000 into the FY 2018-19 Budget and appropriate up to \$433,270 to Science & Technology Advancement's FY 2018-19 Budget, as set forth in Attachment 2. The difference between the proposed revenue and expenditure amounts is due to the revenue estimate included in the FY 2018-19 Budget, which can vary year to year.

NATTS Program (FY 2018-19)

U.S. EPA is expected to provide Section 103 Grant funding in an amount up to \$238,502 to continue the NATTS Program for the period from July 1, 2018, to June 30, 2019. Revenue for this grant in the amount of up to \$83,000 has already been included in the FY 2018-19 Budget. This action is to recognize, upon receipt, the remaining revenue up to \$155,502 into the FY 2018-19 Budget and appropriate up to \$155,502 to Science & Technology Advancement's FY 2018-19 Budget, as set forth in Attachment 3. U.S. EPA concurs with staff's proposed allocation.

PAMS Program (FY 2017-18)

As in previous years, there is a need to reallocate PAMS funding in the final quarter of the federal fiscal year ending September 30, 2018. This action is to recognize the remaining balance up to \$90,000 into the FY 2018-19 Budget and appropriate up to \$90,000 to Science & Technology Advancement's FY 2018-19 Budget, as set forth in Attachment 4. U.S. EPA concurs with staff's proposed reallocation.

Near-Road NO2 Monitoring Program (FY 2017-18)

U.S. EPA has provided Section 103 Grant funds for the implementation of the Near-Road NO2 Monitoring Program. There is a need to reallocate the estimated remaining balance in FY 2018-19. This action is to recognize the remaining balance up to \$29,117 into the FY 2018-19 Budget and appropriate up to \$29,117 to Science & Technology Advancement's FY 2018-19 Budget, as set forth in Attachment 5. U.S. EPA concurs with staff's proposed allocation.

Community Scale Air Toxics Monitoring (FY 2017-18)

U.S. EPA has provided funding in Section 103 Grant funds for the Community Scale Air Toxics Monitoring Program. There is a need to reallocate the estimated remaining balance in FY 2018-19. This action is to recognize the remaining balance up to \$184,000 into the FYs 2018-19 and/or 2019-20 Budget and appropriate up to \$184,000 to Science & Technology Advancement's FYs 2018-19 and/or 2019-20 Budget, as set forth in Attachment 6. U.S. EPA concurs with staff's proposed allocation.

Proposed Purchase Orders through Solicitation Process

Vehicle

At the outset of the Enhanced Particulate Monitoring Program over eight years ago, several dedicated vehicles were purchased to meet the mileage-intensive needs of the Program. Several of these original vehicles now have over 150,000 miles, and the U.S. Department of Homeland Security, which is the funding agency, concurs that replacing one or more of these vehicles is appropriate. At this time staff proposes to replace one vehicle with a vehicle with the lowest possible emissions at an estimated cost of \$40,000, following a formal solicitation process.

NO2 Monitors

The PAMS Program requires the measurement of ambient concentrations of nitric oxide (NO) and NO2 concentrations. The NO and NO2 measurements are used to better characterize the nature and extent of the ozone (O3) problem, track NOx emissions inventory reductions, assess air quality trends and make attainment/nonattainment decisions. Several of the NO2 monitors in the PAMS network have been in operation for many years and are in need of replacement. Up to four NO2 monitors will be replaced at an estimated total cost of \$50,000, after obtaining quotes through a formal solicitation process.

Direct (True) NO2 Monitor

Changes to PAMS requirements include monitoring for NO and NOy (total oxides of nitrogen) in addition to direct NO2, where the latter must be taken with extremely sensitive, fast and accurate NO2 measurements based on Cavity Attenuated Phase Shift (CAPS) technology. One monitor will be procured at an estimated cost of \$20,000. Quotes will be solicited from an informal solicitation process, as allowed by the SCAQMD Procurement Policy and Procedure which authorizes informal bids for equipment or supplies under \$25,000.

PM10 Samplers

U.S. EPA's NATTS Program requires the analysis of air toxics samples collected on filters from PM10 samplers. The current PM10 samplers have been in operation since the inception of the NATTS Program and are in need of replacement. The cost for two PM10 samplers is approximately \$19,000. Quotes will be solicited through an informal solicitation process, as allowed by the SCAQMD Procurement Policy and Procedure which authorizes informal bids for equipment or supplies under \$25,000.

Proposed Purchase through Sole Source Purchase Order

CATI Program

Seven portable Omni samplers manufactured by BGI, Inc., have been acquired for installation on light or electrical poles near potential sources of hexavalent chromium emissions (e.g., metal processing facilities, batch plants, others); this equipment is categorized as instruments within the Services & Supplies Major Object. However, light or electrical poles are not always available around a facility of interest, so staff may need to purchase samplers that can be operated at a secure location inside or outside of a facility where power is available. This type of sampler, based on the pricing, would be categorized as a Capital Outlay within the Capital Outlay Major Object. This proposed action is to transfer and appropriate the remaining balance of \$115,100 to Science & Technology Advancement's FYs 2018-19 and/or 2019-20 Budget, Services & Supplies and/or Capital Outlays Major Objects, from the BP ARCO Settlement Projects Fund (46) for the purchase of up to 25 portable and/or powered integrated filter-based samplers (Table 2).

Outreach

In accordance with SCAQMD's Procurement Policy and Procedure, a public notice advertising the solicitations 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 solicitations 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."

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 for procurement. The request for sole source purchase of the integrated filter-based samplers is made under Sections B.2.b and B.2.c(2) of the Procurement Policy and Procedure. Delay of the purchases for the integrated filter-based samplers (Table 2) could potentially endanger public health or property and the filter samplers are available from only the sole-source due to the use of proprietary technology.

Resource Impacts

U.S. Government funding will fully support the Enhanced Particulate Monitoring Program.

U.S. EPA Section 103 Grant funding will support the continuation of the NATTS, Near-Road NO2, and Community Scale Air Toxics monitoring programs, including equipment, contracts and supplies necessary to meet the objectives of these programs.

U.S. EPA Section 105 Grant funding supports the continuation of the PAMS Program, including equipment, small tools and supplies necessary to meet the objectives of the Program.

In summary, up to \$1,508,619 in federal revenue will be recognized into the FY 2018-19 Budget and up to \$891,889 will be appropriated to Science & Technology Advancement’s FY 2018-19 Budget, as set forth in Attachment 1 (and further detailed in Attachments 2-6). Equipment listed in Table 1 will use these federal funds.

The BP ARCO Settlement Projects Fund (46) will be used to fund the proposed purchases listed in Table 2. These expenses will not exceed \$115,100. Any unused funds will be returned to the BP ARCO Settlement Projects Fund (46).

**Table 1
Proposed Purchase Orders through Solicitation Process**

Description	Qty	Funding Source	Estimated Cost
Vehicle	1	U.S. Government 2018-19	\$40,000
NO2 Monitor	Up to 4	PAMS FY 2017-18	\$50,000
Direct (True) NO2 CAPS Monitor	1	PAMS FY 2017-18	\$20,000
PM10 Samplers	2	NATTS FY 2018-2019	\$19,000
Total Proposed Purchase Orders through Solicitation Process			Not to Exceed \$129,000

Table 2
Proposed Purchase through Sole Source Purchase Order(s)

Description	Qty	Estimated Cost
Integrated filter-based samplers	Up to 25	\$115,100
Total		\$115,100

Attachments

1. Proposed Federal Revenues and Expenditures for FY 2018-19
2. Proposed Enhanced Particulate Monitoring Program Expenditures for FY 2018-19
3. Proposed NATTS Expenditures for FY 2018-19
4. Proposed 25th Year PAMS Expenditures for FY 2018-19 (Remaining FY 2017-18 Balance)
5. Proposed Near-Road NO2 Monitoring Expenditures for FY 2018-19 (Remaining FY 2017-18 Balance)
6. Proposed Community Scale Air Toxics Monitoring Expenditures for FY 2018-19 (Remaining FY 2017-18 Balance)

Attachment 1
Proposed Federal Revenues and Expenditures for FY 2018-19

Program Year	Funding Agency	Program Name	Proposed Revenues	Proposed Expenditures	Detailed Appropriations
FY 2018-19	U.S. Govt.	Enhanced Particulate Monitoring (a)	1,050,000	433,270	Attachment 2
FY 2018-19	EPA-Section 103	National Air Toxics Trends Stations (NATTS)	155,502	155,502	Attachment 3
FY 2017-18*	EPA-Section 105	Photochemical Assessment Monitoring Stations (PAMS)	90,000	90,000	Attachment 4
FY 2017-18*	EPA-Section 103	Near-Road NO2 Monitoring	29,117	29,117	Attachment 5
FY 2017-18*	EPA-Section 103	Community Scale Air Toxics	184,000	184,000	Attachment 6
			1,508,619	891,889	

(a) The difference between the proposed revenue and expenditure amounts is due to the revenue estimate included in the FY 2018-19 Budget which can vary from year to year.

* Recognize revenue and appropriate funds representing the remaining balance from FY 2017-18

Attachment 2
Proposed Enhanced Particulate Monitoring Expenditures for FY 2018-19

Account Description	Account Number	Program Code	Appropriation not to Exceed
*Salaries & Employee Benefits Major Object:			
Overtime	52000	44505	\$ 38,257
Total Salaries & Employee Benefits Major Object			\$ 38,257
Services & Supplies Major Object:			
Temp Agency Services	67460	47505	253,280
Maintenance of Equipment	67600	47505	500
Building Maintenance	67650	47505	200
Auto Mileage	67700	47505	99,833
Clothing	68000	47505	500
Office Expense	68100	47505	200
Small Tools	68300	47505	500
Taxes, License, Fees	69600	47505	0
Total Services & Supplies			\$ 355,013
Capital Outlay Major Object:			
Vehicle (1)	77000	47505	\$ 40,000
Total Capital Outlay Major Object:			\$ 40,000
FY 2018-19 Appropriations			\$ 433,270

* Salaries, Benefits and Indirect Costs (excluding Overtime) are already included in the adopted FY 2018-19 Budget

Attachment 3
Proposed NATTS Expenditures for FY 2018-19

Account Description	Account Number	Program Code	Estimated Expenditures
Services & Supplies Major Object:			
Professional and Specialized Services	67450	47468	\$ 1,000
Maintenance of Equipment	67600	47468	56,000
Travel	67800	47468	3,000
Laboratory Supplies	68050	47468	68,000
Office Expense	68100	47468	1,002
Small Tools	68300	47468	7,500
Total Services & Supplies			\$ 136,502
Capital Outlay Major Object:			
PM10 Monitors (2)	77000	47468	\$ 19,000
Total Capital Outlay Major Object:			\$ 19,000
FY 2018-19 Appropriations			
			\$ 155,502

Note: Salaries, Benefits and Indirect Costs are already included in the adopted FY 2018-19 Budget

Attachment 4

Proposed 25th Year PAMS Expenditures for FY 2018-19 (Remaining FY 2017-18 Balance)

Account Description	Account Number	Program Code	Initial Appropriation (a)	Appropriations not to Exceed
Services & Supplies Major Object:				
Maintenance of Equipment	67600	47530	-	5,000
Laboratory Supplies	68050	47530	-	10,000
Small Tools	68300	47530	-	5,000
Total Services & Supplies			-	20,000
Capital Outlay Major Object:				
Nitrogen Dioxide Monitor (up to 4)	77000	47530	50,000	50,000
Direct (True) Nitrogen Dioxide CAPS Monitor (1)	77000	47530	20,000	20,000
Total Capital Outlay Major Object:			\$ 70,000	\$ 70,000
FY 2018-19 Appropriations			\$ 70,000	\$ 90,000

(a) This is the estimated amount for the first quarter of FY 2018-19. The remaining amount will be appropriated upon reconciliation of FY 2017-18 expenditures.

Attachment 5

Proposed Near-Road NO2 Monitoring Expenditures for FY 2018-19 (Remaining FY 2017-18 Balance)

Account Description	Account Number	Program Code	Initial Appropriation (a)	Appropriations not to Exceed
Services & Supplies Major Object:				
Maintenance of Equipment	67600	47469	2,000	7,617
Travel	67800	47469	2,000	15,500
Laboratory Supplies	68050	47469	500	1,000
Small Tools	68300	47469	2,000	5,000
Total Services & Supplies			\$ 6,500	\$ 29,117
FY 2018-19 Appropriations			\$ 6,500	\$ 29,117

(a) This is the estimated amount for the first quarter of FY 2018-19. The remaining amount will be appropriated upon reconciliation of FY 2017-18 expenditures.

Attachment 6

Proposed Community Scale Air Toxics Expenditures for FY 2018-19 (Remaining FY 2017-18 Balance)

Account Description	Account Number	Program Code	Initial Appropriation (a)	Appropriations not to Exceed
Services & Supplies Major Object:				
Professional and Specialized Services	67450	47469	\$ 50,000	\$ 110,000
Maintenance of Equipment	67600	47469	7,000	14,000
Communications	67900	47469	5,000	10,000
Small Tools *	68300	47469	25,000	50,000
Total Services & Supplies			\$ 87,000	\$ 184,000
FY 2018-19 Appropriations			\$ 87,000	\$ 184,000

(a) This is the estimated amount for the first quarter of FY 2018-19. The remaining amount will be appropriated upon reconciliation of FY 2017-18 expenditures.

* This amount includes \$9,000 for Automatic Information Systems (AIS), which during the procurement process may be categorized as Capital Outlays or Services & Supplies depending on whether the item is purchased or contracted as a service.

BOARD MEETING DATE: July 6, 2018

AGENDA NO. 7

PROPOSAL: Authorize Executive Officer to Enter into CARB AB 197 Grant Agreement, Recognize Revenue, and Appropriate Funds to Support SCAQMD's Annual Emissions Reporting Software

SYNOPSIS: Assembly Bill 197 (AB 197) requires the CARB to make available, and update at least annually, on its website the emissions of greenhouse gases, criteria pollutants, and toxic air contaminants for each facility that reports to the state board and air districts. CARB is allocating initial and ongoing funding to local air districts for implementation of emission reporting requirements pursuant to AB 197. This action is to: 1) authorize the Executive Officer to enter into the grant agreement with CARB; 2) recognize upon receipt in the General Fund up to \$50,000 in FY 2018-19 for initial funding and \$25,000 ongoing in subsequent years; and 3) appropriate \$50,000 to Information Management's FY 2018-19 budget, Services and Supplies Major Object, Professional and Specialized Services account to support the maintenance of the SCAQMD's Annual Emissions Reporting software.

COMMITTEE: Administrative, June 8, 2018; Recommended for Approval

RECOMMENDED ACTIONS:

1. Authorize the Executive Officer to enter into a grant agreement with CARB for implementing AB 197 Emissions Reporting Requirements.
2. Recognize upon receipt in the General Fund up to \$50,000 in FY 2018-19 for initial funding and \$25,000 ongoing in subsequent years.
3. Appropriate \$50,000 to Information Management's FY 2018-19 budget, Services and Supplies Major Object, Professional and Specialized Services account to support maintenance of the SCAQMD's Annual Emissions Reporting software.

Wayne Natri
Executive Officer

Background

The SCAQMD's Annual Emissions Reporting (AER) program was developed to track emissions of air contaminants from permitted facilities. The data collected by AER is used to update the comprehensive emissions inventory for the SCAQMD for all stationary sources with emissions of more than four tons per year of criteria pollutants, and from all facilities in the AB 2588 Air Toxics "Hot Spots" program. Emissions data is collected from facilities every year through the AER web tool and is then made publicly available on SCAQMD's website. The SCAQMD's emission inventory data is also provided annually to CARB. The AER web tool has greatly expanded the SCAQMD's capability to collect data and has also reduced the administrative burden to review and utilize data collected from facilities, however it requires annual maintenance and updating to keep it current.

California Assembly Bill (AB) 197 requires that CARB annually update its website with emissions of greenhouse gases, criteria pollutants, and toxic air contaminants for each facility that reports to the state board and air districts. CARB is providing initial funding in 2018, and ongoing annual funding thereafter to local air districts that enter into a grant agreement to facilitate implementation of emission requirements pursuant to AB 197. SCAQMD is eligible to receive \$50,000 in 2018, and \$25,000 annually thereafter under this grant program. This grant will require staff to carry out similar activities already completed annually, but will include some minor enhancements. Some of the additional activities can be programmed into the AER software. Specifically, under the grant agreement, the minimum duties and requirements of participating local air districts include:

- i. Conducting meetings and maintaining ongoing project coordination with CARB;
- ii. Reviewing, updating, and submitting quality-assured criteria and toxic pollutant emissions for stationary sources under the respective local air district's jurisdiction;
- iii. Overseeing project budget and funds;
- iv. Updating the list of active, inactive, and closed facilities from 2008 - 2016;
- v. Updating facility information and emissions data for facilities that were in operation between 2008 and 2017; and
- vi. Reporting on the above activities to CARB.

Proposal

Staff is seeking Board approval to authorize the Executive Officer to enter into the grant agreement with CARB to receive funding to implement the AB 197 Emissions Reporting Requirements and to recognize upon receipt in the General Fund up to \$50,000 in FY 2018-19 for initial funding and \$25,000 ongoing in subsequent years. Staff is also seeking approval to appropriate \$50,000 to Information Management's FY 2018-19 budget, Services and Supplies Major Object, Professional and Specialized Services to support maintenance of the SCAQMD's Annual Emissions Reporting

software. At the request of CARB staff, in order to reserve the funds from CARB's current fiscal year budget, the grant agreement has already been signed by the Executive Officer. However, per terms of the grant agreement no duties required under the grant will be carried out nor will any grant monies be accepted until and unless the Board approves this item.

Benefits to SCAQMD

The SCAQMD's AER web tool was developed and is currently maintained by a contractor under the Information Management Division. Grant funds will help supplement ongoing costs for maintenance of the emissions reporting software, including some system improvements and functionality enhancements to assist with implementation of AB 197.

Resource Impact

Implementation of this grant is expected to be completed utilizing existing staff resources.

Attachment

Grant Agreement Provisions

Grant Agreement Provisions

A. The parties agree to comply with the requirements and conditions contained herein.

B. GRANT AGREEMENT SUMMARY AND AMENDMENTS (IF APPLICABLE)

Project Title: Quality Assurance Review of Point Source Emissions Data

Grant Funding Amount: **\$50,000.00**

C. GRANT AGREEMENT PARTIES AND CONTACT INFORMATION

1. This Grant is from the California Air Resources Board (hereinafter referred to as CARB or the Board) to the South Coast Air Quality Management District (hereinafter referred to as Grantee).
2. The CARB Project Liaison is Kevin Eslinger. Correspondence regarding this project must be directed to:

Kevin Eslinger
California Air Resources Board
Air Quality Planning and Science Division
P.O. Box 2815
Sacramento, California 95812
Phone: (916) 445-2151
Email: Kevin.Eslinger@arb.ca.gov

3. The Grantee Liaison is Eugene Kang. Correspondence regarding this project must be directed to:

Eugene Kang
Program Supervisor
South Coast Air Quality Management District
21865 E. Copley Drive
Diamond Bar, California 91765
Phone: 909-396-3524
Email: ekang@aqmd.gov

D. DISTRICT GOVERNING BOARD APPROVAL

Prior to the execution of this Grant Agreement, the Grantee is required to submit to CARB a resolution, minute order, or other approval of its governing board that authorizes the Grantee to enter into this Grant Agreement and that commits the Grantee to comply with the requirements of this Grant Agreement. Alternatively, the

Grantee and CARB may execute this Grant Agreement before a Grantee has submitted this governing board resolution, minute order, or other approval to CARB; however, the Grantee may not perform work under this Grant Agreement until the Grantee has submitted this governing board resolution, minute order, or other approval to CARB. CARB will terminate this Grant Agreement if the Grantee has not submitted this governing board resolution, minute order, or other approval to the CARB Project Liaison on or before September 1, 2018.

E. TIME PERIOD

1. Performance of work or other expenses billable to CARB under this Grant may commence after full execution of this Grant Agreement by both parties. Performance on this Grant ends once the Grantee has submitted the Final Report or if this Grant Agreement is terminated, whichever is earlier.
2. Upon completion of the project milestones, the Grantee must submit a draft Final Report and the final Grant Disbursement Request to the CARB Project Liaison no later than March 1, 2019.
3. The Final Report must be received by CARB within thirty (30) days of project completion but no later than June 1, 2019.
4. The CARB Executive Officer retains the authority to terminate or reduce the dollar amount of this Grant if by December 1, 2018, forty (40) percent of the project scope of work has not been completed by the Grantee. In the event of such termination, Section G. Fiscal Administration, 3. Suspension of Payments and Early Grant Termination of this agreement shall apply.
5. If additional funding becomes available, the CARB Executive Officer retains the authority to amend this Grant to provide additional disbursement to the Grantee to complete tasks related to the Scope of Work for this Grant Agreement.

F. SCOPE OF WORK

This section defines the respective duties and requirements of CARB and the Grantee in implementing this Grant Agreement. In sum, the Grantee shall review and update data currently stored or being uploaded into the California Emissions Inventory Development and Reporting System (CEIDARS) database. If additional funding becomes available, this Grant Agreement may be amended in subsequent years to provide additional funding to the Grantee to improve the future data loaded into the CEIDARS database.

1. **CARB is responsible for the following:**

- a. Participating in a project kick-off meeting or conference call and ongoing coordination with the Grantee to discuss project activities and guide project implementation;
- b. Reviewing and approving elements developed by the Grantee for implementation of the project, such as Progress Reports, the draft Final Report, and the Final Report;
- c. Reviewing and approving the Grant Disbursement Request Forms (Exhibit C) and distributing funds to the Grantee in accordance with Exhibit B, Attachment II Project Milestones and Disbursement Schedule if the milestones have been met;
- d. Providing project oversight and accountability (in conjunction with the Grantee); and
- e. Ensuring compliance with the applicable requirements of this Grant Agreement.

2. The Grantee is responsible for the following:

Development and implementation of defined project tasks as described below.

Minimum duties and requirements of the Grantee include to:

- i. Conduct a project kick-off meeting or conference call and maintain ongoing project coordination with the CARB Project Liaison;
- ii. Review, update, and submit to CARB quality assured criteria and toxic pollutant emissions data for stationary sources of criteria pollutant emissions and toxic air contaminants under the Grantee's jurisdiction;
- iii. Oversee the project budget and funds; and
- iv. Submit Progress Reports along with Grant Disbursement Requests, the draft Final Report, and the Final Report to CARB.

a. Project Development and Implementation

The Grantee's Scope of Work includes the following tasks and project elements:

- i. Review and update list of district facilities¹ currently in CARB's CEIDARS emission inventory database for calendar years 2008-2016. (Task 2).

If a district has not reported facilities to CEIDARS, the district should make a determination whether any facilities in their jurisdiction should be added

¹ For purposes of this Grant Agreement, "facility" means a stationary source within the Grantee's jurisdiction that is a reportable source of criteria pollutant or toxic air contaminant emissions.

to the database and report the required information per Section F.2.a.ii below, giving priority to facilities subject to CARB's Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (MRR facilities).

The Grantee must review the facilities in the CEIDARS database for calendar years 2008 - 2016 and provide CARB the operational status (active, inactive, closed, etc.) of each facility within the progress report submitted with the reimbursement request when Task 2 is complete. For inactive and closed facilities, the progress report must include the year when the facility last reported operations. In addition, the Grantee will work with CARB's emission inventory staff to remove closed facilities from the CEIDARS facility tables for the relevant years.

- ii. Review and, to the extent that the Grantee has the necessary data, update the following CEIDARS tables for each facility in operation between 2008 and 2016 (Task 4):
 - a) FACILITY tables (FAC) – The Grantee must review and update the name, address, geospatial coordinates and, to the extent available, other basic information for each emitting facility in CEIDARS.
 - b) Criteria and toxics EMISSION tables (EMS and TEMS) – These tables contain the actual emissions for each emitting process. For each pollutant emitted, the Grantee must review and, if data are available, update information on the amounts emitted annually.
- iii. Update and quality assure facility information and emissions data in the CEIDARS tables described in Section F.2.a.ii above for facilities that were in operation in inventory year 2017 or meet the reporting thresholds in Section F.2.a.iv below. (Task 3)
- iv. Reporting Threshold.

The Grantee must report into CEIDARS annual criteria pollutant emissions for all facilities that emit 10 tons/year or more of any of the criteria pollutants listed in section F.2.a.v below. In addition, the Grantee must report annual toxic pollutant emissions data collected under the Grantee's AB 2588 Air Toxics Hot Spots Information and Assessment Act program for facilities with a prioritization score greater than 10, a cancer risk of 10 in a million or greater, an acute or chronic index greater than 1, or those emitting 10 tons per year of any single hazardous air pollutants (HAP) or 25 tons per year of any combination of HAPs.

- v. Pollutants to be Reported.

When updating the CEIDARS emissions tables described in Section

F.2.a.ii above, the Grantee must report emissions for the following criteria pollutants: total organic gases (TOG), nitrogen oxides (NOx), sulfur oxides (SOx), carbon monoxide (CO), particulate matter (PM), lead (Pb) and ammonia (NH3). In lieu of TOG and PM, the Grantee has the option of reporting reactive organic gases (ROG), and PM10 and/or PM2.5; however, if these three pollutants are not reported, CARB will calculate them based upon the respective TOG and PM speciation profiles. The Grantee must also report emissions of toxics pollutants that are listed in Appendix A-I through A-III of the "AB 2588 Air Toxics "Hot Spots" Emission Inventory Criteria and Guidelines" (located at <https://www.arb.ca.gov/ab2588/2588guid.htm>).

b. Project Kick-off and Ongoing Coordination

Before initiating work on the project, a one-time kick-off meeting or conference call will be held between the Grantee and CARB project management staff. The purpose of this meeting is to discuss items such as the proposed work plan, details of task performance, and issues needing clarification or resolution prior to initiating work. Ongoing Grantee coordination and review meetings with the CARB Project Liaison to discuss project status will be held as needed. Additional meetings may be scheduled at the discretion of the CARB Project Liaison. These meetings may be conducted by phone if deemed appropriate by the CARB Project Liaison. Project coordination and review meetings are the responsibility of the Grantee and should contain:

- i. Agenda for the meeting with conference call information;
- ii. Project status update;
- iii. Discussion of any difficulties encountered since the last project update meeting;
- iv. Discussion of project milestones and upcoming deliverables;
- v. Notification of any pending disbursement requests; and
- vi. Scheduling the next project update meeting.

c. Progress Reports

The Grantee must submit Progress Reports to CARB to accompany Grant Disbursement Requests. Reports may be submitted electronically and, at a minimum, must include:

- i. Progress Report number, title of project, name of Grantee, date of submission, and project Grant number;
- ii. Summary of work completed and in progress since the last progress report, noting progress toward completion of tasks and milestones identified in the work plan;

- iii. Identified problems or concerns and proposed solutions, if applicable;
- iv. Grant funds remaining and expended; and
- v. Itemized invoice showing all costs for which reimbursement is being requested.

d. Final Report

The Grantee must submit a draft Final Report by March 1, 2019, and the Final Report by June 1, 2019. At a minimum, the draft and the Final Report must include the following:

- i. Accounting summary of funds expended;
- ii. Summary of work completed; and
- iii. Narrative of how the milestones have been met.

G. FISCAL ADMINISTRATION

1. Budget

- a. The maximum amount of this Grant is up to **\$50,000.00**. Under no circumstance will CARB reimburse the Grantee for more than this amount. A written Grant Agreement amendment is required whenever there is a change to the amount of this Grant.
- b. The budget for this project is shown in Exhibit B, Attachment I. Grant Disbursement Requests for the project and administration funds must not exceed the Grant amount.
- c. The total funding may be reallocated by CARB at CARB's sole discretion in the event that the Grantee requests less than the total funds allocated for the project.

2. Grant Disbursements

All disbursements from the total Grant award will be made following CARB's review and approval of Grant Disbursement Request Forms documenting completion of project milestones.

- a. The Grantee must submit (via e-mail or regular mail) Grant Disbursement Requests to the CARB Project Liaison. A disbursement request must be made in conjunction with completed milestones documented in a Progress

Report. Grant payments are subject to CARB's approval of Progress Reports and any accompanying deliverables. A payment will not be made if the CARB Project Liaison deems that a milestone has not been accomplished or documented; a deliverable meeting specification has not been provided; claimed expenses are not documented, not valid per the budget, or not reasonable; or the Grantee has not met other terms of the Grant Agreement.

- b. The Division Chief of the Air Quality Planning and Science Division or designee of CARB may review the CARB Project Liaison's approval or disapproval of a Grant Disbursement Request. No reimbursement will be made for expenses that, in the judgment of the Division Chief of the Air Quality Planning and Science Division or designee of CARB, are not reasonable or do not comply with the Grant Agreement. CARB will have sole discretion to accelerate the timeline for allowable disbursements of administrative and project funds identified in Exhibit B, Attachment II, necessary to assure the goals of the project are met.
- c. CARB will withhold payment of ten (10) percent of administrative funds until completion of all work and CARB's approval of the Grantee's Final Report. It is the Grantee's responsibility to submit a Grant Disbursement Request for this final disbursement of funds.
- d. CARB shall disburse funds in accordance with the California Prompt Payment Act, Government Code section 927, et. seq.

3. Suspension of Payments and Grant Agreement Termination

- a. CARB reserves the right to issue a grant suspension order in the event that a dispute should arise. The grant suspension order will be in effect until the dispute has been resolved or the Grant Agreement has been terminated. If the Grantee chooses to continue work on the project after receiving a grant suspension order, the Grantee will not be reimbursed for any expenditure incurred during the suspension in the event CARB terminates the Grant Agreement. If CARB rescinds the suspension order and does not terminate the Grant Agreement, CARB at its sole discretion will reimburse the Grantee for any expenses incurred during the suspension that CARB deems reimbursable in accordance with the terms of the Grant Agreement.
- b. CARB reserves the right to terminate this Grant Agreement upon thirty (30) days' written notice to the Grantee. In case of early termination, the Grantee will submit a Progress Report covering activities up to, and including, the termination date and following the requirements specified herein and in Section H of these provisions.
- c. CARB reserves the right to immediately terminate this Grant Agreement in accordance with Section K, General Grant Provisions.

4. Contingency Provision

In the event this Grant Agreement is terminated for whatever reason, the CARB Executive Officer or designee reserves the right in his or her sole discretion to award any remaining funds to other projects.

5. Documentation of Use of Project Funds

Project funds may be used for administrative costs of accomplishing the tasks identified in the Scope of Work. Administrative costs include: the Grantee's personnel costs; fringe benefit costs; operating costs (including rent, supplies, and equipment); indirect costs (general administrative services, office space, and telephone services); travel expenses and per diem rates set at the rate specified by California Department of Human Resources (CalHR)²; overhead; consultant fees (if pre-approved by CARB); and printing, records retention, and mailing costs.

- a. The Grantee must maintain documentation of all project administration funds, including the following:
 - i. Personnel documentation must make use of timesheets or other labor tracking software. Duty statements or other documentation may also be used to verify the number of staff and actual hours or percent of time staff devoted to project administration;
 - ii. Administration funds for subcontractor(s) must be documented with copies of the contract and invoices;
 - iii. Printing, mailing, records retention, and travel expenses must be documented with receipts and/or invoices;
 - iv. Any reimbursement for necessary travel and per diem must be at rates not to exceed those amounts paid to the State's represented employees. No travel outside the State of California will be reimbursed unless prior written authorization is obtained from CARB. CalHR's travel and per diem reimbursement amounts may be found online at <http://www.calhr.ca.gov/employees/pages/travel-reimbursements.aspx>. Reimbursement must be at the State travel and per diem amounts that are current as of the date costs are incurred by the Grantee; and
 - v. If indirect costs are used to document administration funds for the project, the Grantee must describe how these costs are determined.

² Under no circumstances should the Grantee exceed travel expenses and per diem rates set by CalHR.

- b. The above documentation, records, and referenced materials must be made available for review during monitoring visits and audits by CARB, or its designee. These records must be retained for a minimum of three (3) years after final payment under this Grant Agreement.
- c. The above documentation must be provided to CARB in the Final Report.

H. PROJECT MONITORING

1. Meetings with CARB

- a. Project kick-off: A one-time kick-off meeting or conference call will be held between the Grantee's key project personnel and CARB project management staff. The purpose of this meeting is to discuss items such as the proposed work plan, details of task performance, and issues needing clarification or resolution prior to initiating work.
- b. Ongoing coordination and review meetings: Ongoing Grantee coordination and review conference calls or meetings with the CARB Project Liaison to discuss project status will be held on an as needed basis.
- c. Site visits: Site visits may be established by the CARB Project Liaison during the term of this Grant Agreement.

2. Technical Monitoring

- a. Any changes to the Scope of Work or timeline for the project requires the prior written approval of the CARB Project Liaison, and, depending on the scope and extent of the changes, may require a written Grant Agreement Amendment.
- b. The Grantee must notify the CARB Project Liaison and Grant Coordinator immediately, in writing, if any circumstances arise (technical, economic, or otherwise), which might jeopardize completion of the project, or if there is a change in key project personnel.
- c. In addition to Progress Reports, the Grantee must provide information requested by the CARB Project Liaison that is needed to assess progress in completing tasks and meeting the objectives of the project.
- d. Any change in budget allocations, re-definition of deliverables, or extension of the project schedule must be requested in writing to the CARB Project Liaison and approved by CARB, in its sole discretion. Such changes may require a written Grant Agreement Amendment.

I. DOCUMENTING EXPENDITURE OF STATE FUNDS

The Grantee must provide CARB with documentation accounting for the proper expenditure of CARB funds. The documentation must be provided in Progress Reports submitted to CARB. A Final Report must be submitted after all project funds have been expended.

J. OVERSIGHT AND ACCOUNTABILITY

The Grantee must comply with all oversight responsibilities identified herein.

1. CARB or its designee may recoup project funds which were received based upon misinformation or fraud, or for which a Grantee or its subcontractor(s), or a participant in the project is in significant or continual non-compliance with the terms of this Grant Agreement or state law.
2. CARB or its designee reserves the right to audit at any time during the duration of this Grant Agreement the Grantee's costs of performing the Grant and to refuse payment of any reimbursable costs or expenses that in the opinion of CARB or its designee are unsubstantiated or unverified. The Grantee shall cooperate with CARB or its designee including, but not limited to, promptly providing all information and documents requested, such as all financial records, documents, and other information pertaining to reimbursable costs, and any matching costs and expenses.
3. The Grantee shall retain all records referred to above and provide them for examination and audit by the State for three (3) years after final payment under this Grant Agreement.
4. The Grantee shall develop and maintain accounting procedures to track reservation and expenditures by grant award, fiscal year, and of all funding sources.

K. GENERAL GRANT AGREEMENT PROVISIONS

1. **Amendment:** No amendment or variation of the terms of this Grant Agreement will be valid unless made in writing, signed by all parties and approved as required. No oral understanding or agreement not incorporated in the Grant Agreement is binding on any of the parties.
2. **Assignment:** This Grant Agreement is not assignable by the Grantee, either in whole or in part, without the consent of CARB.
3. **Availability of Funds:** CARB's obligations under this Grant Agreement are contingent upon the availability of funds. In the event funds are not available,

the State shall have no liability to pay any funds whatsoever to the Grantee or to furnish any other considerations under this Grant Agreement.

4. **Audit:** Grantee agrees that CARB, the Department of General Services, Department of Finance, the Bureau of State Audits, or their designated representative(s) must have the right to review and to copy any records and supporting documentation pertaining to the performance of this Grant Agreement and all State funds received. Grantee agrees to maintain such records for possible audit for a minimum of three (3) years after the term of this Grant Agreement is completed, unless a longer period of records retention is stipulated. Grantee agrees to allow the auditor(s) access to such records during normal business hours and to allow interviews of any employees who might reasonably have information related to such records. Further, Grantee agrees to include similar right of the State audit records and interview staff in any Grant related to performance of this Grant Agreement.
5. **Compliance with law, regulations, etc.:** The Grantee agrees that it will, at all times, comply with and require its contractors and subcontractors to comply with all applicable federal, state, and county laws, rules, guidelines, regulations, and requirements.
6. **Computer software:** The Grantee certifies that it has appropriate systems and controls in place to ensure that State funds will not be used in the performance of this Grant Agreement for the acquisition, operation or maintenance of computer software in violation of copyright laws.
7. **Conflict of interest:** The Grantee certifies that it is in compliance with applicable State and/or federal conflict of interest laws.

The Grantee may have no interest, and must not acquire any interest, direct or indirect, which will conflict with its ability to impartially complete the tasks described herein. The Grantee must disclose any direct or indirect financial interest or situation which may pose an actual, apparent, or potential conflict of interest with its duties throughout the Grant Agreement term. CARB may consider the nature and extent of any actual, apparent, or potential conflict of interest in the Grantee's ability to perform the Grant Agreement.

The Grantee must immediately advise CARB in writing of any potential new conflicts of interest throughout the Grant Agreement term.

8. **Disputes:** The Grantee must continue with the responsibilities under this Grant Agreement during any dispute. Grantee staff or management may work in good faith with CARB staff or management to resolve any disagreements or conflicts arising from implementation of this Grant Agreement. However, any disagreements that cannot be resolved at the management level within thirty (30) days of when the issue is first raised with CARB staff must be subject to

resolution by the CARB Executive Officer, or his designated representative. Nothing contained in this paragraph is intended to limit any rights or remedies that the parties may have under law.

- 9. Environmental justice:** In the performance of this Grant Agreement, the Grantee must conduct its programs, policies, and activities that substantially affect human health or the environment in a manner that ensures the fair treatment of people of all races, cultures, and income levels, including minority populations and low-income populations of the State.
- 10. Fiscal management systems and accounting standards:** The Grantee agrees that, at a minimum, its fiscal control and accounting procedures will be sufficient to track Grant funds to a level of expenditure adequate to establish that such funds have not been used in violation of State law or this Grant Agreement. Unless otherwise prohibited by State or local law, the Grantee further agrees that it will maintain separate project accounts in accordance with generally accepted accounting principles.
- 11. Force majeure:** Neither CARB nor the Grantee must be liable for or deemed to be in default for any delay or failure in performance under this Grant Agreement or interruption of services resulting, directly or indirectly, from acts of God, enemy or hostile governmental action, civil commotion, strikes, lockouts, labor disputes, fire, or other casualty, etc.
- 12. Governing law and venue:** This Grant Agreement is governed by and must be interpreted in accordance with the laws of the State of California. CARB and the Grantee hereby agree that any action arising out of this Grant Agreement must be filed and maintained in the Superior Court in and for the County of Sacramento, California, or in the United States District Court in and for the Eastern District of California. The Grantee hereby waives any existing sovereign immunity for the purposes of this Grant Agreement.
- 13. Grantee's responsibility for work:** The Grantee must be responsible for work and for persons or entities engaged in work, including, but not limited to, contractors, subcontractors, suppliers, and providers of services. The Grantee must be responsible for any and all disputes arising out of its contract for work on the project, including, but not limited to, payment disputes with contractors, subcontractors, and providers of services. The State will not mediate disputes between the Grantee and any other entity concerning responsibility for performance of work.
- 14. Indemnification:** The Grantee agrees to indemnify, defend, and hold harmless the State and the Board and its officers, employees, agents, representatives, and successors-in-interest against any and all liability, loss, and expense, including reasonable attorneys' fees, from any and all claims for injury or

damages arising out of the performance by the Grantee, and out of the operation of equipment that is purchased with funds from this Grant award.

15. Independent Contractor: The Grantee, and its agents and employees, if any, in their performance of this Grant Agreement, must act in an independent capacity and not as officers, employees, or agents of CARB.

16. Nondiscrimination: During the performance of this Grant Agreement, the Grantee and its third-party entities shall not unlawfully discriminate, harass, or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, physical disability (including HIV and AIDS), mental disability, medical condition (e.g., cancer), age (over 40), marital status, and denial of family care leave. The Grantee and its third-party entities shall insure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination and harassment. The Grantee and its third-party entities shall comply with the provisions of the Fair Employment and Housing Act (Gov. Code §12990 (a-f) et seq.) and the applicable regulations promulgated thereunder (California Code of Regulations, Title 2, Section 7285 et seq.). The applicable regulations of the Fair Employment and Housing Commission implementing Government Code Section 12990 (a-f), set forth in Chapter 5 of Division 4 of Title 2 of the California Code of Regulations, are incorporated into this Agreement by reference and made a part hereof as if set forth in full. The Grantee and its third-party entities shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement.

The Grantee shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform work under this Grant Agreement.

17. No third-party rights: The parties to this Grant Agreement do not create rights in, or grant remedies to, any third-party as a beneficiary of this Grant Agreement, or of any duty, covenant, obligation or undertaking establish herein.

18. Prevailing wages and labor compliance: If applicable, the Grantee agrees to be bound by all the provisions of State Labor Code Section 1771 regarding prevailing wages. If applicable, the Grantee must monitor all agreements subject to reimbursement from this Grant Agreement to ensure that the prevailing wage provisions of State Labor Code Section 1771 are being met.

19. Professionals: For projects involving installation or construction services, the Grantee agrees that only licensed professionals will be used to perform services under this Grant Agreement where such services are called for and licensed professionals are required for those services under State law.

20. Severability: If a court of competent jurisdiction holds any provision of this Grant Agreement to be illegal, unenforceable or invalid in whole or in part for

any reason, the validity and enforceability of the remaining provisions, or portions of those provisions, will not be affected.

- 21. Termination:** In addition to the termination provisions in Section G.3 of this Grant Agreement, CARB may terminate this Grant Agreement by written notice at any time prior to completion of this Grant Agreement, upon violation by the Grantee of any material provision after such violation has been called to the attention of the Grantee and after failure of the Grantee to bring itself into compliance with the provisions of this Grant Agreement. Upon termination, the Grantee must immediately return project funds to CARB.
- 22. Timeliness:** Time is of the essence in this Grant Agreement. Grantee must proceed with and complete the Project in an expeditious manner.
- 23. Waiver of Rights:** Any waiver of rights with respect to a default or other matter arising under the Grant Agreement at any time by either party must not be considered a waiver of rights with respect to any other default or matter. Any rights and remedies of the State provided for in this Grant Agreement are in addition to any other rights and remedies provided by law.

Work Statement

Budget Summary (Attachment I)
Project Milestones and Disbursement Schedule (Attachment II)
Project Schedule (Attachment III)

EXHIBIT B, Attachment I

Budget Summary

Grantee: South Coast Air Quality Management District

Grant Agreement No.: G17-EIDG-29

Project: Quality Assurance Review of Point Source Emissions Data

Total Costs & Funding

Costs	Grant
Total Project Funds	\$50,000.00

EXHIBIT B, Attachment II

Project Milestones and Disbursement Schedule

Grantee: South Coast Air Quality Management District

Grant Agreement No.: G17-EIDG-29

Project: Quality Assurance Review of Point Source Emissions Data

Task	Milestone Description	Scheduled Payment of Grant Funds
1	Execute Grant Agreement, District Resolution, Kick-Off Meeting	N/A
2	Update list of active, inactive and closed facilities in 2008-2016 calendar years	\$15,000.00 (30 percent)
3	Review and update facility information and emissions data for facilities that were in operation in 2017	\$15,000.00 (30 percent)
4	Review and update facility information and emissions data for facilities that were in operation between 2008 and 2016	\$15,000.00 (30 percent)
5	Submittal of Draft Final Report to CARB (no later than March 1, 2019)	N/A
6	Submittal of Final Report to CARB (no later than June 1, 2019)	\$5,000.00 (10 percent)
Grant Agreement Total Funding Amount		\$50,000.00

EXHIBIT B, Attachment III

Project Schedule

Grantee: South Coast Air Quality Management District

Grant Agreement No.: G17-EIDG-29

Project: Quality Assurance Review of Point Source Emissions Data

Work Task	Timeline
Task 1a – Grant Agreement Execution	June 25, 2018
Task 1b – District Resolution	September 1, 2018
Task 1c – Kick Off Meeting	TBD
Task 2 – Update list of active, inactive and closed facilities in 2008-2016 calendar years	October 1, 2018
Task 3 – Update facility information and emissions data for facilities that were in operation in 2017	August 1, 2018
Task 4 – Review and update facility information and emissions data for facilities that were in operation between 2008 and 2016	December 1, 2018
Task 5 – Draft Final Report	March 1, 2019
Task 6 – Final Report	June 1, 2019

EXHIBIT C

(This is a draft sample form. Please contact program staff for final electronic version)

**AB 197 DISTRICT GRANTS PROGRAM
GRANT DISBURSEMENT REQUEST FORM**

General Information				
Project Name		Grant Number		
Grantee Name		Amendment #		
Contact Person		Fiscal Year		
Mailing Address		Disbursement #		
Phone Number		FAX Number		
Disbursement Request				
	Original Grant	Total Previous Disbursement	This Request	Remaining Balance
Project Funds				\$0
Processing/Admin Fees				\$0
Total	\$ -	\$ -	\$ -	\$0
Documentation attached for disbursement justification:		Attachments:		
<input type="checkbox"/> Project Funds <input type="checkbox"/> Processing Fees		_____		
<p><i>I certify under penalty of perjury that the information contained in this Grant Disbursement Request Form and all attachments is correct and complete and is in accordance with the Grant Agreement. In addition, I hereby authorize the California Air Resources Board to make any inquiries to confirm this information.</i></p>				
Authorized Official				
<i>Print Name</i>		<i>Title</i>		
<i>Signature</i>		<i>Date</i>		
FOR STATE USE ONLY				
		Date Request Received by CARB:	Date to Accounting:	Date to SCO:
CARB Project Liaison				
<i>Print Name</i>		<i>Signature</i>		<i>Date</i>
Grant Manager Approval				
<i>Print Name</i>		<i>Signature</i>		<i>Date</i>
Total Disbursement:		Fund:		PCA:
Total Disbursement:		Fund:		PCA:
Total Disbursement:		Fund:		PCA:

BOARD MEETING DATE: July 6, 2018

AGENDA NO. 8

PROPOSAL: Transfer and Appropriate Funds and Execute Contract for Short- and Long-Term Systems Development, Maintenance and Support Services

SYNOPSIS SCAQMD currently has contracts with several companies for short- and long-term systems development, maintenance and support services. These contracts are periodically amended as additional needs are defined. This action is to transfer and appropriate funds from the General Fund Undesignated (Unassigned) Fund Balance to Information Management's FY 2018-19 Budget and execute a contract with AgreeYa Solutions for needed development and maintenance work.

COMMITTEE: Administrative, June 8, 2018; Recommended for Approval

RECOMMENDED ACTIONS:

1. Transfer and appropriate \$195,000 from the Undesignated (Unassigned) Fund Balance to Information Management's FY 2018-19 Budget, Capital Outlays Major Object, Capital Outlays account.
2. Authorize the Executive Officer to execute a contract for systems development, maintenance and support services with AgreeYa Solutions in the amount of \$195,000 from Information Management's FY 2018-19 Budget, Capital Outlays Major Object, Capital Outlays account.

Wayne Nastri
Executive Officer

RMM:OSM:RR:jga

Background

At the March 2, 2018 meeting, the Board authorized staff to initiate level-of-effort contracts with several vendors for systems development, maintenance and support services. Since these contracts were authorized, agreements have been executed with three of the four approved vendors. We now seek a task order contract with AgreeYa Solutions, the fourth vendor, for a term of one year, with the option to extend the term for two (2) one-year periods. Due to the indefinite nature of the work, the final contract amount cannot be determined at this time. As is the case with this action, future funding for the contract will be added upon approval of a task order.

System development and maintenance efforts are currently needed to replace the SCAQMD Mobile application. Two (2) new native applications will be developed for the Apple iOS and Android environments. The goal of the initial versions is to deliver the most up-to-date and meaningful air quality information to the public as well as access to event, announcement, and alert information. These applications will make use of the latest mobile and cloud-based technologies, such as the ArcGIS On-Line mapping platform to deliver a polished end-user experience. Further, in order to provide a richer more uniform user experience, several supporting infrastructure pieces i.e. web applications, web services and web Application Program Interfaces (APIs) will also be rewritten.

Proposal

Staff is recommending that the Board authorize the Executive Officer to execute a contract with AgreeYa Solutions in the amount of \$195,000 to develop the new SCAQMD Mobile application.

Resource Impacts

Sufficient funding will be available in Information Management’s FY 2018-19 Budget upon approval of the transfer and appropriation of \$195,000 from the Undesignated (Unassigned) Fund Balance.

BOARD MEETING DATE: July 6, 2018

AGENDA NO. 9

PROPOSAL: Approve Contract Awards and Modifications as Approved by MSRC

SYNOPSIS: As part of their FYs 2016-18 Work Program, the MSRC approved new contracts and modifications to contracts under the Local Government Partnership Program. The MSRC also approved a replacement contract as part of their FY 2011-12 Work Program. At this time the MSRC seeks Board approval of the contract awards and modifications.

COMMITTEE: Mobile Source Air Pollution Reduction Review, June 21, 2018; Recommended for Approval

RECOMMENDED ACTIONS:

1. Approve contract awards totaling \$1,855,906 under the Local Government Partnership Program, as part of approval of the FYs 2016-18 Work Program, as described in this letter and as follows:
 - a. A contract with the City of Buena Park in an amount not to exceed \$107,960 to install at least five electric vehicle charging stations;
 - b. A contract with the City of Orange in an amount not to exceed \$25,000 to procure a heavy-duty near-zero-emission vehicle;
 - c. A contract with the City of Culver City in an amount not to exceed \$1,130 to procure a light-duty zero-emission vehicle;
 - d. A contract with the City of Orange in an amount not to exceed \$59,776 to procure up to four light-duty zero-emission vehicles and install at least eight electric vehicle charging stations;
 - e. A contract with the County of Riverside in an amount not to exceed \$425,000 to procure up to seventeen heavy-duty near-zero-emission vehicles;
 - f. A contract with the City of Pasadena in an amount not to exceed \$183,670 to install at least forty electric vehicle charging stations;
 - g. A contract with the City of Santa Monica in an amount not to exceed \$121,500 to install at least thirty-nine electric vehicle charging stations;
 - h. A contract with the City of Beaumont in an amount not to exceed \$31,870 to install at least two electric vehicle charging stations; and
 - i. A contract with the City of Los Angeles in an amount not to exceed \$900,000 to procure up to eight medium-duty zero-emission vehicles and install at least eight electric vehicle charging stations;

2. Approve modified contract awards under the Local Government Partnership Program, increasing the value of the awards by a total of \$38,450 as part of approval of the FYs 2016-18 Work Program, as described in this letter and as follows:
 - a. For the \$80,400 award to the City of Eastvale for the procurement of two medium-duty zero-emission vehicles and installation of electric vehicle charging stations, procure two light-duty and one medium-duty zero-emission vehicle instead of the two medium-duty zero-emission vehicles originally proposed, with no change to the charging stations project element or to the total award amount;
 - b. For the \$365,000 award to the City of Santa Ana for the procurement of six light-duty zero-emission vehicles and nine heavy-duty near-zero-emission vehicles as well as the installation of electric vehicle charging stations, increase the award by \$20,000 to \$385,000;
 - c. For the \$86,174 award to the City of Perris for the procurement of a medium-duty zero-emission vehicle and the installation of electric vehicle charging stations, increase the award by \$8,450 to \$94,624; and
 - d. For the \$115,690 award to the City of Mission Viejo for the procurement of two light-duty zero-emission vehicles, the expansion of an existing CNG station, and the installation of electric vehicle charging stations, increase the award by \$10,000 to \$125,690;
3. Approve a replacement contract with the City of Bellflower, in an amount not to exceed \$100,000, for the installation of electric vehicle charging stations under the Local Government Match Program, as part of approval of the FY 2011-12 Work Program, as described in this letter;
4. Authorize MSRC the authority to adjust contract awards up to five percent, as necessary and previously granted in prior work programs; and
5. Authorize the Chairman of the Board to execute the new and modified contracts under the FY 2011-12 and FYs 2016-18 Work Programs, as described above and in this letter.

Larry McCallon
Chair, MSRC

MMM:FM:CR

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.

At its June 21, 2018 meeting, the MSRC considered recommended awards and modifications under the Local Government Partnership Program. The MSRC also considered a replacement contract under the Local Government Match Program. Details are provided below in the Proposals section.

Outreach

In accordance with SCAQMD's Procurement Policy and Procedure, public notices advertising the Local Government Partnership Invitation to Negotiate were 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 solicitation was advertised in the Desert Sun newspaper for expanded outreach in the Coachella Valley.

Additionally, potential bidders may have been notified utilizing SCAQMD's own electronic listing of certified minority vendors. Notice of the solicitation 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 solicitation was posted on the MSRC's website at <http://www.cleantransportationfunding.org> and electronic notifications were sent to those subscribing to this website's notification service.

Proposals

At its June 21, 2018 meeting, the MSRC considered recommendations from its MSRC-TAC and approved the following:

FYs 2016-18 Local Government Partnership Program (new awards)

The MSRC approved the release of Local Government Partnership PON2018-01 under the FYs 2016-18 Work Program. The Invitation to Negotiate (ITN), with a targeted funding level of \$21,180,650, focuses on providing funds for projects to support SCAQMD's 2016 AQMP. Cities and counties which have opted into the AB 2766 motor vehicle registration surcharge fee program are eligible to participate. The majority of participants would be allocated maximum funding equivalent to their annual AB 2766 Subvention Fund allocation; however, those whose annual Subvention Fund allocation is less than \$50,000 would be eligible to receive a maximum of \$50,000, and the maximum allocation for any single city or county would be \$3,000,000. MSRC funding could be used for light-duty zero emission vehicle purchases and leases, medium- and heavy-duty zero emission vehicle purchases, near-zero emission heavy-duty alternative fuel vehicle purchases and repower, electric vehicle charging station installation, and construction or expansion of alternative fuel refueling infrastructure, subject to match funding requirements as outlined in the ITN. Additionally, those jurisdictions eligible for a maximum contribution of \$50,000 would have the option to pursue traffic signal synchronization, bicycle active transportation, and first mile/last mile strategies. The ITN includes an open application period commencing with its release on September 1, 2017, and closing August 2, 2018.

The MSRC previously approved awards totaling \$6,552,616 in response to this solicitation. The MSRC approved nine additional awards totaling \$1,855,906 as part of the FYs 2016-18 Work Program, as follows:

- a. A contract with the City of Buena Park in an amount not to exceed \$107,960 to install at least five electric vehicle charging stations;
- b. A contract with the City of Orange in an amount not to exceed \$25,000 to procure a heavy-duty near-zero-emission vehicle;
- c. A contract with the City of Culver City in an amount not to exceed \$1,130 to procure a light-duty zero-emission vehicle;
- d. A contract with the City of Orange in an amount not to exceed \$59,776 to procure up to four light-duty zero-emission vehicles and install at least eight electric vehicle charging stations;
- e. A contract with the County of Riverside in an amount not to exceed \$425,000 to procure up to seventeen heavy-duty near-zero-emission vehicles;
- f. A contract with the City of Pasadena in an amount not to exceed \$183,670 to install at least forty electric vehicle charging stations;
- g. A contract with the City of Santa Monica in an amount not to exceed \$121,500 to install at least thirty-nine electric vehicle charging stations;
- h. A contract with the City of Beaumont in an amount not to exceed \$31,870 to install at least two electric vehicle charging stations; and
- i. A contract with the City of Los Angeles in an amount not to exceed \$900,000 to procure up to eight medium-duty zero-emission vehicles and install at least eight electric vehicle charging stations.

FYs 2016-18 Local Government Partnership Program (modified awards)

The MSRC also considered and approved proposed modifications to previous Local Government Partnership Program awards, increasing the value of the awards by a total of \$38,450 as part of approval of the FYs 2016-18 Work Program, as follows:

- a. For the May 4, 2018 \$80,400 award to the City of Eastvale for the procurement of two medium-duty zero-emission vehicles and installation of electric vehicle charging stations, procure two light-duty and one medium-duty zero-emission vehicle instead of the two medium-duty zero-emission vehicles originally proposed, with no change to the charging stations project element or to the total award amount, due to changes in City priorities;
- b. For the May 4, 2018 \$365,000 award to the City of Santa Ana for the procurement of six light-duty zero-emission vehicles and nine heavy-duty near-zero-emission vehicles as well as the installation of electric vehicle charging stations, increase the award by \$20,000 to \$385,000, to correct a computational error in the application;
- c. For the May 4, 2018 \$86,174 award to the City of Perris for the procurement of a medium-duty zero-emission vehicle and the installation of electric vehicle charging stations, increase the award by \$8,450 to \$94,624, to correct a discrepancy in the application; and

- d. For the June 1, 2018 \$115,690 award to the City of Mission Viejo for the procurement of two light-duty zero-emission vehicles, the expansion of an existing CNG station, and the installation of electric vehicle charging stations, increase the award by \$10,000 to \$125,690, to accommodate the City's request that the \$10,000 they had requested for pilot building permit fee and electric vehicle technology training programs be directed towards electric vehicle charging stations if the proposed pilot programs were deemed ineligible.

FY 2011-12 Local Government Match Program

As part of the FY 2011-12 Work Program, the MSRC awarded the City of Bellflower \$270,000 towards the installation of fifteen Level II electric vehicle charging stations; this was subsequently modified to \$100,000 for two fast charge stations. The City requested an extension, which the MSRC approved, but the City did not return the contract modification documents so the contract lapsed on May 6, 2018. Shortly thereafter, the City submitted a request to complete the project. They indicated that the modification documents might have been misplaced. The MSRC considered and approved a 12-month replacement contract in the amount of \$100,000 as part of the FY 2011-12 Work Program.

At this time, the MSRC requests the SCAQMD Board to approve the contract awards and modifications as part of approval of the FY 2011-12 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 will be drawn from this fund.

 [Back to Agenda](#)

BOARD MEETING DATE: July 6, 2018

AGENDA NO. 10

REPORT: Legislative, Public Affairs and Media Report

SYNOPSIS: This report highlights the May 2018 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

DJA:LTO:DM

BACKGROUND

This report summarizes the activities of the Legislative, Public Affairs and Media Office for May 2018. 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; and Outreach to Business and Governments.

ENVIRONMENTAL JUSTICE UPDATE

The following are key environmental justice-related activities in which staff participated during May 2018. These events involve communities which suffer disproportionately from adverse air quality impacts.

May 30

Staff held a community meeting in Santa Ana on AB 617, which focused on reducing air pollution in environmental justice communities. The purpose of the meeting was to seek input on how to prioritize communities in our region for future air monitoring and emission reduction programs.

May 31

Staff participated in Career Day at Today's Fresh Start Charter School in an environmental justice area of Los Angeles. Staff spoke to six classes of students for 20 minutes each about SCAQMD and air quality issues. Students were engaged and asked questions related to the presentations.

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:

May 2

- ACT (Alternative Clean Transportation) Expo, Long Beach Convention & Entertainment Center.

May 11

- Asian American Pacific Islander Heritage Month Celebration, Garden Grove.

May 12

- 2nd Los Angeles Unified School District, Youth Sustainability & Environmental Summit, Dr. Maya Angelou Community High School, Los Angeles.

May 17

- SCAQMD, Seniors Celebrating Healthy Living & Clean Air Fair, Los Angeles Convention Center.

May 20

- Alhambra Eco Fair, Alhambra Farmers Market.

May 30

- SCE 1,000th EV Station Celebration, South El Monte High School.

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.

May 5

- Staff spoke and provided information on the environmental impacts of air pollution in communities and displayed and shared information about alternative fuel vehicles, to 300 middle and high school students during an environmental event hosted by the Phi Beta, Charters Inc., in Long Beach.

May 16

- Staff spoke and provided information on SCAQMD, air quality and the agency’s mission and answered questions from an audience of 40 industry representatives at the Desert Valley Builders Association in Palm Desert.

May 17

- Staff presented information on SCAQMD and sources of air pollution to a group of officials visiting from 13 different countries through the US Department of State, International Visitors Council of Los Angeles. The group also toured SCAQMD headquarters, including its laboratory and fleet of alternative fuel vehicles.

May 30

- Staff spoke and provided information on SCAQMD, air pollution, clean air technologies, and the health impacts of air pollution to 72 students at Temecula Preparatory School.
- Staff participated in a panel at the UC Irvine Climate Solutions Summit at the Beckman Center. Information was shared about SCAQMD, air pollution, clean air technologies, and health impacts of air pollution to 240 attendees. Staff also answered questions from attendees and discussed the latest efforts to reduce air pollution and climate change.

COMMUNICATION CENTER STATISTICS

The Communication Center handles calls on SCAQMD’s main line, the 1-800-CUT-SMOG® line, the Spanish line, and after-hours calls to each of those lines. Total calls received in the month of May were:

Calls to SCAQMD’s Main Line and 1-800-CUT-SMOG® Line	3,897
Calls to SCAQMD’s Spanish-language Line	<u>43</u>
Total Calls	3,940

PUBLIC INFORMATION CENTER STATISTICS

The Public Information Center (PIC) handles phone calls and walk-in requests for general information. Information for the month of May is summarized below:

Calls Received by PIC Staff	153
<u>Calls to Automated System</u>	<u>675</u>
Total Calls	828

Visitor Transactions	238
Email Advisories Sent	3,286

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 259 companies
- Issued 82 clearance letters
- Conducted 6 free on-site consultations

Types of businesses assisted

Auto Body Shops	Dry Cleaners	Furniture Refinishing Facilities
Plating Facilities	Gas Stations	Engineering, Construction & Architecture Firms
Auto Repair Centers	Restaurants	
Manufacturing Facilities	Printing 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: 68
 Press Releases Issued: 4

Major Media Topics for May

All inquiries closed unless noted as pending

- **Aliso Canyon** – KCBS requested information on reporting requirements for the SoCalGas Aliso Canyon site, as well as information on the allocation of SoCalGas settlement funds. Additional inquiries were made regarding the contract with KORE Infrastructure. A story aired on KCBS exploring residents’ concerns about ongoing health problems.

- **Hydrofluoric Acid** – Staff responded to inquiries from KPCC, BNA/Bloomberg News, Los Angeles/Orange County Building Trades News, and the Daily Breeze, regarding the 4/28/18 Refinery Committee meeting on Proposed Rule 1410.
- **Indirect Source Rules** – L.A. Times editorial page staff requested information on SCAQMD’s proposed indirect source measures, as well as potential penalties for failure to implement the AQMP. L.A. Times, KCRW and L.A. Business Journal inquired as to whether the Board would hold a vote on indirect source rules at the May 4 Board meeting.
- **ACT Expo** – Staff provided a quote from the Executive Officer to the California CNG Partnership for its news release issued at the ACT Expo.
- **STAR Grant Community Meeting** – Inland Empire Business Journal sought information on the STAR Grant, and the use of portable air monitors. The L.A. Times requested an update on SCAQMD’s participation in the STAR grant program.
- **Fuel-Efficient Trucking** – Staff conducted an interview with KPCC on the Shell Starship 8, a hyper-fuel-efficient prototype truck.
- **Fire Ring Restrictions** – The L.A. Times inquired as to whether SCAQMD still maintained strict limits on the use of fire rings at local beaches.
- **Palisades News** – The editor inquired regarding an asbestos investigation at a local residence, findings of SCAQMD’s inspection and the status of asbestos abatement. Reporter submitted a public records request for information related to the topic.
- **Permit Backlog Reduction** – Following a press release by Media staff, over 100 publications reported on the reduction of the SCAQMD permit inventory by about 50%.

Media Campaigns

Check Before You Burn:

- Contract renewal completed.
- Google AdWords component under review.

The Right to Breathe

- Translation and subtitling process underway with translator and producer.
- Contract approved to be extended.
- The Google AdWords campaign received 5,384 clicks, 4,901,166 impressions, 1,976,682 views.

News Releases & Media Advisories Issued

- SCAQMD Slashes Permit Applications Inventory by 50 Percent – May 24, 2018
- Southland Seniors Learn About Air Quality and Healthy Living at SCAQMD Event – May 17, 2018
- SCAQMD Initiates Advisory Council to Engage Young Adults – May 4, 2018
- SCAQMD Board Directs Further Development of Indirect Source Measures – May 4, 2018

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	Garden Grove	Pomona
Anaheim	Grand Terrace	Rialto
Arcadia	Glendora	Rosemead
Azusa	Huntington Beach	San Bernardino
Baldwin Park	Highland	Santa Ana
Brea	Irvine	San Dimas
Chino	La Cañada Flintridge	San Gabriel
Claremont	La Habra	Sierra Madre
Covina	La Puente	South El Monte
Colton	La Verne	South Pasadena
Costa Mesa	Lake Forest	Temple City
Crestline	Laguna Niguel	Tustin
Cypress	Los Angeles	Walnut
Diamond Bar	Loma Linda	West Covina
Duarte	Mentone	Westminster
El Monte	Monrovia	Yucaipa
Fountain Valley	Monterey Park	

Visits and/or communications were conducted with elected officials or staff from the following state and federal offices:

- U.S. Senator Dianne Feinstein
- U.S. Senator Kamala Harris
- U.S. Congresswoman Nanette Barragán
- U.S. Congresswoman Judy Chu
- U.S. Congressman Lou Correa
- U.S. Congresswoman Mimi Walters
- Senator Steven Bradford
- Senator Josh Newman
- Senator Janet Nguyen
- Senator Anthony Portantino
- Assembly Member Ed Chau
- Assembly Member Steven Choi
- Assembly Member Tom Daly
- Assembly Member Mike Gipson
- Assembly Member Chris Holden
- Assembly Member Patrick O'Donnell
- Assembly Member Blanca Rubio

Staff represented SCAQMD and/or provided updates or a presentation to the following governmental agencies and business organizations:

Anaheim Chamber of Commerce
Barrio Planners Incorporated, Los Angeles
Chino Valley Chamber of Commerce
Esperanza Community Housing Corporation, Los Angeles
Future Ports, San Pedro
Gateway Cities Council of Governments
League of California Cities, Orange County Division
Metrolink Southern California
Orange County Council of Governments
Port of Long Beach
Port of Los Angeles
San Pedro Chamber of Commerce
San Pedro & Peninsula Homeowners Association
Southern California Association of Governments
San Gabriel Valley Council of Governments
Sunline Transit Agency, Thousand Palms
South Pasadena Chamber of Commerce
U.S. Green Building Council
Westside Cities Council of Governments
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:

Alhambra Senior Center
American Lung Association
American Cancer Society
Asian Pacific Islander Forward Movement, Los Angeles
All Peoples Christian Center, Los Angeles
Arcadia Community Center
Boyle Heights Neighborhood Council
Brookins-Kirkland Community AME Church, Los Angeles
California Communities Against Toxics
California Black Womens Health Project, Inglewood
Central San Pedro Neighborhood Council
Climate Resolve, Los Angeles
Coalition for a Safe Environment, Los Angeles
Coalition for Clean Air, Los Angeles
Coastal San Pedro Neighborhood Council
Communities for a Better Environment, Los Angeles

Crestline Connect
Culver City Senior Center
Delhi Community Center, Santa Ana
Earthjustice, Los Angeles
Environmental Defense Fund, National
Fairfax Senior Citizens Center, Los Angeles
Harbor Alliance of Neighborhood Councils
Healthy African American Families
I Heart, Wilmington
Investing in Place, Los Angeles
Jessie Terry Manor Apartments, Los Angeles
Jackie Robinson Senior Center, Pasadena
Jiangsu Environmental Protection Department
Joslyn Senior Center, Alhambra
Julia McNeill Senior Center, Baldwin Park
Jurupa Valley School District
Kilgore Manor, Los Angeles
La Habra College
Lake Gregory Regional Park Committee
Lake Gregory Environmental Education Center
Liberty Hill Foundation
Little Tokyo Service Center, Los Angeles
Los Angeles Unified School District
Los Angeles Asthma Coalition
Los Angeles Alliance for a New Economy
Northwest San Pedro Neighborhood Council
Mark Keppel High School, Monterey Park
Morgan Place, Los Angeles
Mothers of East Los Angeles
One LA – Pacoima Beautiful
Pan Pacific Senior Activities Center, Los Angeles
Rancho Santiago Community College District
Resurrection Church, Los Angeles
Rim of the World Recreation and Park District, Rimforest
Robert F. Kennedy Institute, Wilmington
Torch Middle School, La Puente
Saint Barnabas Senior Center, Los Angeles
San Gabriel Senior Center
San Gabriel Adult Recreation Center
Sierra Club, Los Angeles
St. Eugene Over 50+ Club, Los Angeles
South Los Angeles Alliance of Neighborhood Councils
STAND LA
Stoval Terrace, Los Angeles

TRAC (Taking Responsibility And Control) 91746 Neighborhood Watch Group, La Puente/Industry

University of California, Irvine

University of Southern California, Keck School of Medicine

Youth Science Center, Hacienda Heights

Yvonne Burke Senior & Community Center, Los Angeles

Villa-Park Community Center, Pasadena

Watts Senior Center, Los Angeles

West Adams Neighborhood Council, Los Angeles

Wilmington Neighborhood Council

Willowbrook Senior Center, Los Angeles

[↑ Back to Agenda](#)

BOARD MEETING DATE: July 6, 2018

AGENDA NO. 11

REPORT: Report to Legislature and CARB on SCAQMD's Regulatory Activities for Calendar Year 2017

SYNOPSIS: The SCAQMD is required by law to submit a report to the Legislature and CARB on its regulatory activities for the preceding calendar year. The report is to include a summary of each rule and rule amendment adopted by SCAQMD, number of permits issued, denied, or cancelled, emission offset transactions, budget and forecast, and an update on the Clean Fuels program. Also included is the Annual RECLAIM Audit Report, as required by RECLAIM Rule 2015 - Backstop Provisions.

COMMITTEE: No Committee Review

RECOMMENDED ACTION:

Receive and file the attached report, and direct staff to forward the final report to the Legislature and the California Air Resources Board.

Wayne Natri
Executive Officer

DA: FW:HC:jf

Background

SCAQMD is subject to several internal and external reviews of its air quality programs. These include an annual review of SCAQMD's proposed operating budget for the upcoming fiscal year and compliance program audits.

In 1990, the Legislature directed SCAQMD to provide an annual review of its regulatory activities (SB 1928, Presley), and specified the type of information required (Health and Safety Code §40452). Many of the required elements overlap with other requirements of separate legislation. For example, information on SCAQMD's Clean Fuels Program is a requirement of this report, but is also a separate requirement under

legislation passed in 1999 (SB 98, Alarcón). The purpose of this report is to fill in pieces of additional data needed to compile a comprehensive regulatory overview. Most of the information included in this report is not new, but is simply a compilation of information previously seen by the Board. For example, Chapter I lists all the rules and rule amendments adopted by the Board during 2017. The Annual RECLAIM Audit Report, which the Board approved on March 2, 2018, is also required to be submitted to the Legislature by Rule 2015 - Backstop Provisions.

The specific requirements of this report include:

- A summary of each major rule and rule amendment adopted by the Board;
- The number of permits to operate or permits to construct that were issued, denied, cancelled or not renewed;
- Data on emission offset transactions and applications during the previous year;
- The budget and forecast of staff increases or decreases for the following fiscal year;
- An identification of the source of all revenues used to finance the SCAQMD's activities;
- An update on the SCAQMD's Clean Fuels program; and
- The annual RECLAIM Audit Report.

Attachment

Report to the Legislature on the Regulatory Activities of the SCAQMD for Calendar Year 2017¹

¹ Due to the bulk of these materials, chapters III, IV and V of the report can be found online at <http://www.aqmd.gov/docs/default-source/LPA-Outreach/sb-1928-report-to-legislature-july-2018.pdf?sfvrsn=8>. Anyone who would like to obtain a hard copy of these materials may do so by contacting SCAQMD's Public Information Center at (909) 396-2001.

REPORT TO THE LEGISLATURE ON THE
REGULATORY ACTIVITIES OF THE
SOUTH COAST
AIR QUALITY MANAGEMENT DISTRICT

Pursuant to
Chapter 1702, Statutes of 1990 (SB 1928)



July 2018
Cleaning the Air that We Breathe...

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
GOVERNING BOARD**

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Speaker of the Assembly Appointee

Vice Chairman: Dr. Clark E. Parker, Sr.
Senate Rules Committee Appointee

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Supervisor, 5th District
County of Riverside

Ben Benoit
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Cities of Riverside County

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Cities of Orange County

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Supervisor, 2nd District
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Hilda L Solis
Supervisor, 1st District
County of Los Angeles

Wayne Nastri
Executive Officer

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EXECUTIVE SUMMARY

Introduction

The South Coast Air Quality Management District (SCAQMD) is subject to internal and external reviews of its air quality programs. These include annual reviews of the District's budget, forecast and proposed operating budget for the upcoming fiscal year, and compliance program audits. In addition, the SCAQMD is required to submit to the California Air Resources Board (CARB) and State Legislature an annual review of its regulatory activities for the preceding calendar year. The attached report satisfies this latter requirement which is mandated pursuant to Chapter 1702, Statutes of 1990 (SB 1928, Presley), Section 40452 of the California Health and Safety Code.

Rule Adoptions and Amendments in 2017 and CEQA Alternatives

This section contains a summary of each major rule adoption or amendment adopted by the SCAQMD Governing Board in the preceding calendar year (e.g., 2017). Each summary contains detailed information about the estimated emission reductions, cost effectiveness, alternatives considered pursuant to the requirements in the California Environmental Quality Act (CEQA), socioeconomic impacts, and sources of funding.

Projects undertaken by public agencies are subject to CEQA, so rules and regulations promulgated by SCAQMD must be reviewed to determine if they are considered to be a "project" as defined by CEQA. If they are not a "project" or they are determined to be exempt from CEQA, no further action is required. If the project has the potential to create significant or less than significant adverse effects on the environment, then an environmental analysis is necessary. New rules or existing rules being amended often require a comprehensive CEQA document that contains an environmental impact analysis which includes the following:

- * identification of potentially significant adverse environmental impacts evaluated based on environmental checklist topics;
- * identification of feasible measures, if any, to mitigate significant adverse environmental impacts to the greatest extent feasible;
- * if necessary, a discussion and comparison of the relative merits of feasible project alternatives that generally achieve the goals of the project, but may generate fewer or less severe adverse environmental impacts; and,
- * identification of environmental topics not significantly adversely affected by the project.

If it is concluded in the CEQA document that no significant adverse environmental impacts would be generated by the proposed project, neither the identification of feasible mitigation measures nor an analysis of CEQA alternatives to the project is required. If significant adverse environmental impacts are identified, feasible mitigation measures, if any, and alternatives must be identified and an analysis of the relative merits of each alternative is required.

SCAQMD operates under a regulatory program certified by the Secretary for Resources pursuant to Public Resources Code (PRC) Section 21080.5. Certification means that the SCAQMD can incorporate its environmental analyses into CEQA documents other than environmental impact reports (EIRs), negative declarations (NDs), or mitigated NDs (MNDs). In addition, certified CEQA programs are not subject to a limited number of specific CEQA requirements identified in PRC Section 21080.5. All documents prepared by SCAQMD under its certified regulatory program are called Environmental Assessments (EAs). SCAQMD rules and regulations are subject to SCAQMD's certified CEQA program, while plans (e.g., AQMP) are not. In addition, Supplemental EAs, Addenda, and EAs for projects determined not to have significant environmental impacts often contain a more focused analysis of potential environmental impacts.

In 2017, the SCAQMD adopted four new rules (Rules 415, 1180, 1430, and 1466) and one plan (the 2016 Air Quality Management Plan (AQMP)). Also in 2017, the SCAQMD amended eight rules (Rules 219, 222, 1147, 1118, 1168, 1401, 1420, and 1466) and one regulation (Regulation III). Of these projects, analyses of CEQA alternatives were required and conducted for the 2016 AQMP and Rule 1147. Refer to Chapter 1 for rule adoptions, rule amendments and CEQA Alternatives details.

Refer to Chapter 1 for rule adoptions, rule amendments and CEQA Alternatives details.

CEQA Lead Agency Projects

SCAQMD also acts as the Lead Agency under CEQA for non-SCAQMD projects where SCAQMD typically has primary approval, i.e., discretionary permitting authority. Under CEQA, the Lead Agency is responsible for determining whether an EIR, ND, or other type of CEQA document is necessary for any proposal considered to be a "project" as defined by CEQA. Further, the Lead Agency is responsible for preparing the environmental analysis, complying with all procedural requirements of CEQA, and approving the environmental documents. All documents prepared by SCAQMD for permit projects are subject to the standard CEQA requirements. SCAQMD staff is responsible for preparing or reviewing prepared CEQA documents for stationary source permit projects.

In 2017, the SCAQMD approved three lead agency projects for which two Addenda to Final Mitigated Negative Declarations for two Southern California Edison locations and one Final Environmental Impact Report for the Tesoro Los Angeles Refinery were prepared. Refer to Chapter 1 for CEQA Lead Agency details.

Refer to Chapter 1 for CEQA Lead Agency details.

Socioeconomic Impact Analyses

California Health and Safety Code Section 40440.8 requires that SCAQMD perform socioeconomic impact assessments for its rules and regulations that will significantly affect air quality or emissions limitations. Prior to the requirements of Section 40440.8, SCAQMD staff had been evaluating the socioeconomic impacts of its actions pursuant to a 1989 resolution of its Governing Board. Additionally, SCAQMD staff assesses socioeconomic

impacts of CEQA alternatives to those rules with significant cost and emission reduction impacts.

The elements of socioeconomic impact assessments include direct effects on various types of affected industries in terms of control costs and cost effectiveness as well as public health benefits associated with AQMPs. Additionally, SCAQMD staff uses an economic model developed by Regional Economic Models, Inc. (REMI) to analyze the potential direct and indirect socioeconomic impacts of SCAQMD rules on Los Angeles, Riverside, Orange, and San Bernardino Counties. These impacts include, but are not limited to employment and competitiveness.

In 2017, the SCAQMD identified and analyzed new socioeconomic impacts for four newly adopted rules (Rules 415, 1180, 1430, and 1466), seven amended rules (Rules 219, 222, 1118, 1168, 1401, 1420, and 1466) and one plan (e.g., 2016 AQMP). The SCAQMD also identified and analyzed ongoing socioeconomic impacts for one amended regulation (e.g., Regulation III). No socioeconomic impacts were identified for one amended rule (Rule 1147). Refer to Chapter 1 for Socioeconomic Impact Analyses details.

Refer to Chapter 1 for Socioeconomic Impact Analyses.

Engineering and Permitting

Background

Section 40452 of the California Health and Safety Code requires that the SCAQMD submit an annual report to both the state board and Legislature that summarizes its regulatory activities for the preceding calendar year. Paragraph (b) of Section 40452 requires that the annual report include data on “the number of permits to operate or to construct, by type of industry, that are issued and denied, and the number of permits to operate that are not renewed.” Paragraph (c) of section 40452 requires that the annual report also includes data on emission offset transactions and applications during the previous fiscal year, including an accounting of the number of applications for permits for new or modified sources that were denied because of the unavailability of emission offsets. In addition, SCAQMD Rule 2015 requires submittal of the annual Regional Clean Air Incentives Market (RECLAIM) Audit Report for the 2016 Compliance Year to the Legislature.

The following paragraphs provide a brief summary for each report.

Permitting Data – Calendar Year 2017

During calendar year 2017, SCAQMD dispositioned a total of 10,504 applications. The majority of these applications were for Permits to Operate (3,774), Area Sources & Certified/Registrations (2,927), and Changes of Operators (1,236). Also, 910 permits were not renewed. The total number of dispositioned applications for 2017 is about 6% higher than the total for 2016, mainly attributed to the SCAQMD’s continuing Permit Application Backlog Reduction efforts. This data, broken down into nine different categories, is summarized in Table 1 on page 45.

Table 2 contains a breakdown of permits dispositioned (in the nine categories) and permits not renewed, by type of industry. The type of industry was based on North American Industry Classification System (NAICS) codes, which were provided by the applicant at the time of application filing. The top four NAICS codes were 324110 – Petroleum Refineries, 445110 – Supermarkets and Other Grocery (except for Convenience) Stores, 447190 – Other Gasoline Stations, and 811121 – Automotive Body, Paint, and Interior Repair and Maintenance.

Emission Offset Transactions Data – Fiscal Year 2016/2017

During fiscal year 2016-17, a total of 52 emission offset transactions were completed, which include 40 transactions for reactive organic gases (ROG), 9 transactions for oxides of nitrogen (NO_x), and 3 transactions for oxides of sulfur (SO_x). There were no transactions for carbon monoxide (CO) and particulate matter with an aerodynamic diameter less than 10 microns (PM₁₀). The amount of emissions offsets transferred, by pollutant, include 477 pounds per day of ROG, 18 pounds per day of NO_x, and 47 pounds per day of SO_x (see Table 5 on page 90). No banking applications resulting in the issuance of new emission offsets for ROG, NO_x, SO_x, CO or PM₁₀ were processed. Additionally, no applications were denied permits for new or modified sources due to the unavailability of emission offsets. (See page 89 for details).

RECLAIM Audit Report

The REgional CLean Air Incentives Market (RECLAIM) program was adopted in 1993 to provide facilities with flexibility in achieving the same emissions reduction goals as would have been achieved under the traditional command and control approach, while lowering the cost of compliance. To ensure RECLAIM is achieving its goal, SCAQMD Rule 2015 - Backstop Provisions, requires preparation of an annual audit report on the program. This Annual RECLAIM Audit Report assesses emission reductions, availability of RECLAIM Trading Credits (RTCs) and their average annual prices, job impacts, compliance issues, and other measures of performance for the twenty-third year of this program. The results of the annual audit show that RECLAIM continues to meet its aggregate emission goals and all other specified objectives.

As discussed in more detail in the audit report (see Chapter V), a total of 262 facilities were in the RECLAIM program at the end of Compliance Year 2016. Total NO_x emissions from RECLAIM facilities were 19% less than the aggregate NO_x allocations, and SO_x emissions were 29% less than the aggregate SO_x allocations for the program. The vast majority of RECLAIM facilities complied with their allocations during the 2016 compliance year (95% of NO_x facilities and 97% of SO_x facilities).

A total of over \$1.48 billion in RTCs has been traded since the adoption of RECLAIM, of which \$6.9 million occurred in calendar year 2016 (compared to \$118.6 million in calendar year 2015), excluding swaps. The annual average prices of discrete-year NO_x and SO_x RTCs and infinite-year block (IYB – trades that involve blocks of RTCs with a specified start

year and continuing in perpetuity) NO_x and SO_x RTCs traded in calendar years 2016 and 2017 were all below the applicable review thresholds for initiating program review.

In Compliance Year 2016, RECLAIM facilities reported a net loss of 982 jobs, representing 0.88% of their total employment. The RECLAIM program also met other applicable requirements including meeting the applicable federal offset ratio under New Source Review and having no significant seasonal fluctuation in emissions. Additionally, there is no evidence that RECLAIM resulted in any increase in health impacts due to emissions of air toxics.

Refer to Chapter V for the 2015 Annual RECLAIM Audit Report.

Budget and Work Program

Refer to Chapter III for the Fiscal Year 2018-2019 Budget Report.

Clean Fuels Program

2017 Annual Report

In CY 2017, the SCAQMD Clean Fuels Program executed 59 new contracts, projects or studies and modified 8 continuing projects adding dollars toward research, development, demonstration and deployment (RDD&D) projects as well as technology assessment and transfer of alternative fuel and clean fuel technologies. An additional 8 revenue agreements totaling \$14.3 million were also executed. The SCAQMD Clean Fuels Program contributed nearly \$17.9 million in partnership with other governmental organizations, private industry, academia and research institutes, and interested parties, with total project costs of more than \$118.7 million. The \$17.9 million includes \$6.2 million recognized into the Clean Fuels Fund as pass-through funds from project partners to facilitate project administration by the Clean Fuels Program. In addition, in CY 2017, the Clean Fuels Program continued to leverage other outside funding opportunities, securing new awards totaling \$20.5 million from federal, state and local funding opportunities. Similar to the prior year, the significant project scope of a few key contracts executed in 2017 resulted in higher than average leveraging of Clean Fuels dollars. Typical leveraging is \$3-\$4 for every \$1 in Clean Fuels funding. In 2016, leveraging was \$1:\$9; in 2017, SCAQMD continued this upward trend with more than \$6 leveraged for every \$1 in Clean Fuels funds. Leveraging dollars and aggressively pursuing funding opportunities are more important than ever given the magnitude of additional funding identified in the 2016 AQMP to achieve federal ozone air quality standards.

The projects or studies executed in 2017 included a diverse mix of advanced technologies. The following core areas of technology advancement for 2017 executed contracts (in order of funding percentage) include:

1. Electric and Hybrid Vehicle Technologies and Related Infrastructure (emphasizing electric and hybrid electric trucks and container transport technologies with zero emission operations);

2. Fuels and Emission Studies;
3. Engine Systems/Technologies (emphasizing alternative and renewable fuels for truck and rail applications);
4. Hydrogen and Mobile Fuel Cell Technologies and Infrastructure;
5. Technology Assessment and Transfer/Outreach; and
6. Fueling Infrastructure and Deployment (predominantly natural gas and renewable fuels).

During CY 2017, the SCAQMD supported a variety of projects and technologies, ranging from near-term to long-term RDD&D activities. This “technology portfolio” strategy provides the SCAQMD the ability and flexibility to leverage state and federal funding while also addressing the specific needs of the South Coast Air Basin (Basin). Projects included significant electric and hybrid electric technologies and infrastructure to develop and demonstrate medium- and heavy-duty vehicles in support of transitioning to a zero and near-zero emissions goods movement industry; fuels and emissions studies to conduct in-use testing and fuel characterization and usage profiles as well as evaluating strategies for reducing emissions in the goods movement sector; development, demonstration and deployment of large displacement natural gas engines; and continued demonstration and deployment of electric charging infrastructure; and natural gas and renewable natural gas deployment and support.

In addition to the 67 executed contracts and projects, 19 RDD&D projects or studies and 24 technology assessment and transfer contracts were completed in 2017. As of January 1, 2018, there were 94 open contracts in the Clean Fuels Program.

In accordance with California Health and Safety Code Section 40448.5.1(d), this annual report must be submitted to the state legislature by March 31, 2018, after approval by the SCAQMD Governing Board.

2018 Plan Update

Every year, staff re-evaluates the Clean Fuels Program to develop a Plan Update based on a reassessment of the technology progress and direction for the agency. The Program continually seeks to support the development and deployment of lower-emitting technologies. The design and implementation of the Program Plan must balance the needs in the various technology sectors with technology readiness, emissions reduction potential and cofunding opportunities. As the state has turned a great deal of its attention to climate change and petroleum reduction goals, the SCAQMD has necessarily remained committed to developing, demonstrating and commercializing technologies that reduce criteria pollutants, specifically NOx. Fortunately many, if not the majority, of these technologies that address the Basin’s need for NOx reductions also garner reductions in greenhouse gases (GHG) and petroleum use. Due to these “co-benefits,” the SCAQMD has been successful in partnering with the state, which allows the Clean Fuels Program to leverage its funding extensively.

To identify technology and project opportunities where funding can make a significant difference in deploying progressively cleaner technologies in the Basin, the SCAQMD

employs a number of outreach and networking activities. These activities range from close involvement with state and federal collaboratives, partnerships and industrial coalitions, to the issuance of Program Opportunity Notices to solicit project ideas and concepts as well as issuance of Requests for Information (RFI) to determine the state of various technologies and the development and commercialization challenges faced by those technologies. For example, in 2016, an RFI was released to solicit information from diesel engine manufacturers and other entities to identify ultra-low NO_x emission technology strategies that will result in commercially viable diesel engine technologies, capable of using renewable diesel for on-road heavy-duty vehicles such that they can achieve emission levels 90% below the current 2010 emission standards for NO_x and reduce PM emissions to the greatest extent possible. Subsequently, in partnership with CARB and the Port of Los Angeles, staff initiated a project with Southwest Research Institute to develop advanced control systems to lower emissions from large displacement diesel engines, including under low-load and low-temperature conditions. Potential follow-up development, demonstration and certification projects resulting from this RFI are included conceptually within the Draft 2018 Plan Update.

The Plan Update includes projects to develop, demonstrate and commercialize a variety of technologies, from near-term to long-term commercialization, that are intended to provide solutions to the emission control needs identified in the 2016 AQMP. Given the need for significant reductions over the next five to ten years, near-zero and zero emission technologies are emphasized. Areas of focus include:

- reducing emissions from port-related activities, such as cargo handling equipment and container movement technologies, including demonstration and deployment of cargo container movement systems with zero emission range;
- developing and demonstrating ultra-low emission liquid fuel larger displacement engines and zero emission heavy-duty vehicles;
- developing, demonstrating and deploying advanced natural gas engines and zero emission technologies for high horsepower applications;
- mitigating criteria pollutant increases from renewable fuels, such as renewable natural gas, diesel and hydrogen as well as other renewable fuels and waste streams;
- developing and demonstrating electric-drive (fuel cell, battery, plug-in hybrid and hybrid) technologies across light-, medium- and heavy-duty platforms;
- producing transportation fuels and energy from renewable and waste stream sources; and
- establishing large-scale hydrogen refueling and EV charging infrastructures to help accelerate the introduction zero emission vehicles into the market.

These potential projects for 2018 total \$16.7 million, with anticipated leveraging of more than \$4 for every \$1 of Clean Fuels funding for total project costs of nearly \$70 million. Some of the proposed projects may also be funded by revenue sources other than the Clean Fuels Program, especially Volatile Organic Compounds (VOCs) and incentive projects.

CHAPTER I
RULE DEVELOPMENT, CEQA, and SOCIOECONOMIC IMPACT ANALYSES

RULE ADOPTIONS AND AMENDMENTS IN 2017 AND CEQA ALTERNATIVES

This section contains a summary of each major rule adoption or amendment adopted by the SCAQMD Governing Board in the preceding calendar year (e.g., 2017). Each summary contains detailed information about the estimated emission reductions, cost effectiveness, alternatives considered pursuant to the requirements in the California Environmental Quality Act (CEQA), socioeconomic impacts, and sources of funding.

Projects undertaken by public agencies are subject to CEQA, so rules and regulations promulgated by SCAQMD must be reviewed to determine if they are considered to be a “project” as defined by CEQA. If they are not a “project” or they are determined to be exempt from CEQA, no further action is required. If the project has the potential to create significant or less than significant adverse effects on the environment, then an environmental analysis is necessary. New rules or existing rules being amended often require a comprehensive CEQA document that contains an environmental impact analysis which includes the following:

- identification of potentially significant adverse environmental impacts evaluated based on environmental checklist topics;
- identification of feasible measures, if any, to mitigate significant adverse environmental impacts to the greatest extent feasible;
- if necessary, a discussion and comparison of the relative merits of feasible project alternatives that generally achieve the goals of the project, but may generate fewer or less severe adverse environmental impacts; and,
- identification of environmental topics not significantly adversely affected by the project.

If it is concluded in the CEQA document that no significant adverse environmental impacts would be generated by the proposed project, neither the identification of feasible mitigation measures nor an analysis of CEQA alternatives to the project is required. If significant adverse environmental impacts are identified, feasible mitigation measures, if any, and alternatives must be identified and an analysis of the relative merits of each alternative is required.

SCAQMD operates under a regulatory program certified by the Secretary for Resources pursuant to Public Resources Code (PRC) Section 21080.5. Certification means that the SCAQMD can incorporate its environmental analyses into CEQA documents other than environmental impact reports (EIRs), negative declarations (NDs), or mitigated NDs (MNDs). In addition, certified CEQA programs are not subject to a limited number of specific CEQA requirements identified in PRC Section 21080.5. All documents prepared by SCAQMD under its certified regulatory program are called Environmental Assessments (EAs). SCAQMD rules and regulations are subject to SCAQMD’s certified CEQA program, while plans (e.g., AQMP) are not. In addition, Supplemental EAs, Addenda, and EAs for projects determined not to have significant environmental impacts often contain a more focused analysis of potential environmental impacts.

The following section lists all new and amended rules adopted by the Governing Board in 2017 by month. The type of CEQA document (including projects exempt from CEQA) is described for each new rule or rule amendment project. Alternatives are summarized only for those projects requiring an alternatives analysis pursuant to CEQA.

JANUARY 6, 2017

No rules were adopted or amended in January.

FEBRUARY 3, 2017

No rules were adopted or amended in February.

MARCH 3, 2017

One rule and one plan was adopted in March, as follows:

- 1. Adopted Rule 1430 – Control of Emissions From Metal Grinding Operations at Metal Forging Facilities:** Rule 1430 was adopted to reduce particulate matter and toxic emissions and help to reduce odors from metal grinding and cutting operations at forging facilities. Prior to the adoption of Rule 1430, metal grinding and cutting operations were exempt from SCAQMD permits. Based on monitoring, sampling, and site visits, metal grinding at forging facilities was identified as a substantial source of metal particulate emissions, some of which are also toxic air contaminants. Under Rule 1430, forging facilities are: 1) prohibited from conducting grinding and cutting operations in the open air; 2) required to vent metal grinding and cutting operations to emission control devices that meet specified emission standard levels; 3) required to conduct metal grinding and cutting operations in a building enclosure to reduce fugitive emissions; and 4) required to implement a series of housekeeping measures to further minimize fugitive emissions. A Final EA was prepared for the project and the analysis concluded that there would be no significant adverse environmental impacts. Since no significant adverse environmental impacts were identified, no alternatives analysis and no mitigation measures were required by CEQA. Mitigation measures were not made a condition of the approval of this project and a Mitigation Monitoring and Reporting Plan under Public Resources Code Section 21081.6 and CEQA Guidelines Section 15097 was not adopted for this project. Findings, pursuant to CEQA Guidelines Section 15091, and a Statement of Overriding Considerations, pursuant to Public Resources Code Section 21081.6 and CEQA Guidelines Section 15093, were not adopted for this project. The SCAQMD Governing Board certified the Final EA and approved the project.

Estimated Emission Reductions: Emission reductions in metal toxic air contaminants in hexavalent chromium, nickel, cadmium, and arsenic are expected, but were not quantified. *Cost Effectiveness:* Not applicable. *CEQA Alternatives:* None, not required. *Socioeconomic Impact:* See Socioeconomic Impact Analysis section. *Source(s) of Funding:* Emission Fees, and Annual Operating Fees.

- 2. Adopted the 2016 Air Quality Management Plan (AQMP):** The 2016 AQMP identified control measures and strategies to bring the region into attainment with the revoked 1997 8-hour National Ambient Air Quality Standard (standard) (80 ppb) for ozone by 2024; the 2008 8-hour ozone standard (75 ppb) by 2032; the 2012 annual

PM2.5 standard (12 $\mu\text{g}/\text{m}^3$) by 2025; the 2006 24-hour PM2.5 standard (35 $\mu\text{g}/\text{m}^3$) by 2019; and the revoked 1979 1-hour ozone standard (120 ppb) by 2023. The 2016 AQMP Control Strategy consists of three components: 1) the SCAQMD's Stationary, Area, and Mobile Source Control Measures; 2) State and Federal Control Measures provided by the California Air Resources Board; and 3) Regional Transportation Strategy and Control Measures provided by the Southern California Association of Governments. The 2016 AQMP includes emission inventories and control measures for stationary, area and mobile sources, the most current air quality setting, updated growth projections, new modeling techniques, demonstrations of compliance with state and federal Clean Air Act requirements, and an implementation schedule for adoption of the proposed control strategy.

A Final Program Environmental Impact Report was prepared for the project which identified potential adverse impacts that may result from implementing the project for the following environmental topic areas: 1) aesthetics; 2) air quality and greenhouse gases (GHGs); 3) energy; 4) hazards and hazardous materials; 5) hydrology and water quality; 6) noise; 7) solid and hazardous waste; and 8) transportation and traffic. The analysis concluded that significant and unavoidable adverse environmental impacts from the project are expected to occur after implementing mitigation measures for the following environmental topic areas: 1) aesthetics from increased glare and from the construction and operation of catenary lines and use of bonnet technology for ships; 2) construction air quality and GHGs; 3) energy (due to increased electricity demand); 4) hazards and hazardous materials due to: (a) increased flammability of solvents; (b) storage, accidental release and transportation of ammonia; (c) storage and transportation of liquefied natural gas (LNG); and (d) proximity to schools; 5) hydrology (water demand); 6) construction noise and vibration; 7) solid construction waste and operational waste from vehicle and equipment scrapping; and, 8) transportation and traffic during construction and during operation on roadways with catenary lines and at the harbors. Since significant adverse environmental impacts were identified, an alternatives analysis was required by CEQA and prepared that included the following alternatives:

Alternative 1 - No Project Alternative: The project (e.g., adopting the 2016 AQMP) would not be occur. The net effect of not adopting the 2016 AQMP would be a continuation of the 2012 AQMP and the 2007 AQMP. SCAQMD continues to implement the 2012 AQMP, which received a limited approval and limited disapproval by U.S. EPA on April 14, 2016. For the control measures adopted by the SCAQMD over this period, 11.7 tons per day of PM2.5 reductions was achieved by 2014 and 2.4 tons per day of VOC reductions and 19.5 tons per day of NOx reductions will be achieved by 2023. Only a portion of the control measures that have been implemented since 2012 and the ones for which further evaluation is underway would be in effect. The No Project Alternative assumes that these control measures would still be implemented.

SCAQMD and CARB achieved their 2007 AQMP short-term emission reduction targets. Therefore, the 2007 AQMP does not contain any remaining short-term stationary source or mobile source control measures to be adopted. All remaining necessary emission reductions to demonstrate attainment from implementing the 2007

AQMP would be obtained through implementing the federal Clean Air Act (CAA) Section 182(e)(5) measures, which are also referred to as “black box” measures.

Alternative 2 – Mobile Source Reduction Only: Under Alternative 2, no SCAQMD stationary source control measures would be implemented. Only CARB’s mobile source and consumer product control measures and the SCAQMD’s localized mobile source strategy would be implemented. In order to be a viable alternative to be considered, the shortfall of NO_x emission reductions needed to demonstrate attainment the ozone standards would need to be classified as CAA Section 182(e)(5) measures. Attainment of the 2012 annual PM_{2.5} standards, similar to the conclusions in the 2016 AQMP, would be achieved with implementation of the ozone strategy.

Alternative 3 – CARB or SCAQMD Regulation Only: The 2016 AQMP includes a control strategy constructed from traditional regulatory control measures, co-benefit measures and incentive-based measures that will require adopted guidelines and secured funding, along with federal enforceable commitments pursuant to U.S. EPA. Alternative 3 is designed to implement only traditional regulatory control measures and co-benefit measures. These measures are being proposed by both SCAQMD and CARB for stationary, area and mobile sources, and includes some measures regulating federal sources. By removing the emission reductions from the incentive-based measures, attainment of the standards is at risk. Alternative 3 would propose the following additional control measures to assist in making up the remaining emission reductions necessary to demonstration attainment of the ozone standards.

- Zero or near-zero emitting space heating technologies in new construction, home additions, and multi-family housing
- Establish a Port backstop rule with commitments to meet certain air pollution reduction milestones
- Adopt new and update existing fleet rules from light duty vehicles to heavy-duty equipment requiring zero emission vehicles or technologies
- Ensure zero emission lawn and garden equipment at new developments
- Develop indirect source rule to control pollution from warehouse operations
- Require solar energy technology in new construction and major remodels

If the emission reductions from the additional proposed control strategies are determined to not be enough to demonstrate attainment the ozone standards, the remaining NO_x emission reductions would be classified as CAA Section 182(e)(5) measures. Some of the proposed control measures under Alternative 3 would be implemented through regulation by the SCAQMD while others would be implemented through regulation by CARB.

Alternative 4 – Expanded Incentive Funding: Alternative 4 would expand the incentive funding programs to increase the penetration of cleaner vehicles and technologies, allowing for more emission reductions and possibly earlier attainment of ambient air quality standards. Depending on the method of funding, current

incentive costs are in the range of 4.25 to 15.8 billion dollars. Under this alternative it would be assumed that additional incentive funding sources would be found. This alternative has the opportunity to provide for more emission reductions and ease the need for additional regulatory action. However, the attainment goals would still need to be achieved as expeditiously as practicable.

The Final Program Environmental Impact Report concluded that the project would have significant and unavoidable adverse environmental impacts even after mitigation measures were identified and applied. As such, mitigation measures were made a condition of the approval of this project and a Mitigation Monitoring and Reporting Plan under Public Resources Code Section 21081.6 and CEQA Guidelines Section 15097 was adopted for this project. Findings were made pursuant to CEQA Guidelines Section 15091. A Statement of Overriding Considerations, prepared pursuant to Public Resources Code Section 21081.6 and CEQA Guidelines Section 15093, was also adopted for this project. The SCAQMD Governing Board certified the Final Program Environmental Impact Report and approved the project.

Estimated Emission Reductions: 6.4 tons per day (tpd) VOC and 23 tpd NOx from those control measures that could be quantified. Additional emission reductions are expected, but were not quantified. *Cost Effectiveness:* Control measures for PM2.5: \$15,000 - \$61,500 per ton; Control measures for ozone: \$800 - \$53,000 per ton. *CEQA Alternatives:* Four alternatives were analyzed, alternatives described above. *Socioeconomic Impact:* See Socioeconomic Impact Analysis section. *Sources of Funding:* Area Source Fees, CARB Subvention Funding, Emission Fees, Annual Operating Fees, Transportation Fees, and Mobile Source Fees.

APRIL 7, 2017

No rules were adopted or amended in April.

MAY 5, 2017

Two rules comprised as one project were amended in May, as follows:

- 1. Amended Rule 219 - Equipment Not Requiring a Written Permit Pursuant to Regulation II; and Amended Rule 222 - Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II:** Rule 219 was amended to exempt the following equipment and/or processes from the requirement to obtain a SCAQMD permit because they emit very small levels of criteria pollutants and have minimal toxic emission profiles: engines at remote 2-way radio towers fueled with liquefied propane gas or compressed natural gas; sub-slab ventilation systems; passive carbon filter odor control of food waste slurry storage tanks; hand-held plasma-arc cutting and laser cutting equipment; separation/segregation of plastic materials for recycling without cutting, shredding, grinding, or odors; certain coffee roasting equipment; small batch breweries; and equipment used for dehydrated meat manufacturing. In addition, Rule 219 was amended to remove existing exemptions for the following equipment and/or processes because they have the potential to emit criteria pollutants at greater than de minimis levels, emit toxic air contaminants of concern, or create a nuisance: cutting of stainless steel and alloys containing toxics; portable asphalt

recycling equipment; greenwaste shredding or grinding; separation/segregation of plastic materials that involves cutting, shredding, grinding or odors; recycling of expanded polystyrene; equipment used for cleaning of diesel particulate filters; certain surface preparation tanks with toxic emissions; certain plating, stripping or anodizing tanks with toxic emissions; and paper, carpet, and fabric recycling operations. Other amendments to Rule 219 included minor clarifications and editorial corrections for food oven combustion equipment, fuel cells, charbroilers, barbeque grills and other underfired grills, VOC-containing liquid storage and transfer equipment, quench tanks for heat treating operations, pavement striping, and certain printing, coating and drying operations. Rule 222 was amended to add the following equipment to the SCAQMD Rule 222 filing program in lieu of requiring a written SCAQMD permit because they have been identified as small sources of emissions: industrial cooling towers located in a chemical plant, refinery or other industrial facility; natural gas transfer pumps and natural gas repressurization equipment; and engines registered under the statewide Portable Equipment Registration Program (PERP) used in the Outer Continental Shelf (OCS). Storage tanks of aqueous urea solutions and certain natural gas and crude oil production equipment were also exempted from Rule 219 but were included in the Rule 222 filing program. The project was determined to be exempt from CEQA and a Notice of Exemption was filed with the County Clerks of Los Angeles, Orange, Riverside and San Bernardino counties. Since the project was determined to be exempt from CEQA, no alternatives analysis was required. The SCAQMD Governing Board approved the project as proposed.

Estimated Emission Reductions: None. *Cost Effectiveness:* Not applicable. *CEQA Alternatives:* None, not required. *Socioeconomic Impact:* See Socioeconomic Impact Analysis section. *Source of Funding:* Permit Fees and Emission Fees.

JUNE 2, 2017

One regulation was amended in June, as follows:

- 1. Amended Regulation III – Fees:** Amendments to Regulation III rules consisted of four components. First, pursuant to Rule 320 – Automatic Adjustment Based on Consumer Price Index for Regulation III - Fees, most fees in Rules 301, 303, 304, 304.1, 306, 307.1, 308, 309, 311, 313, 314, and 315 were updated, effective July 1, 2017 according to the increase in the Calendar Year 2016 California Consumer Price Index (CPI) of 2.5 percent. Second, Rules 301 and 306 were amended to increase the 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, Rules 301, 306, and 309 were amended to increase the 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, various administrative amendments with no fee impacts were made to Rules 301, 306, 308, and 314. The project was determined to be exempt from CEQA and a Notice of Exemption was filed with the County Clerks of Los Angeles, Orange, Riverside and San Bernardino counties. Since the project was determined to be exempt from CEQA, no alternatives

analysis was required. The SCAQMD Governing Board approved the project as proposed.

Estimated Emission Reductions: None. *Cost Effectiveness:* Not applicable. *CEQA Alternatives:* None, not required. *Socioeconomic Impact:* See Socioeconomic Impact Analysis section. *Source of Funding:* Permit Fees and Emission Fees.

JULY 7, 2017

One rule was adopted and two rules were amended in July, as follows:

- 1. Adopted Rule 1466 - Control of Particulate Emissions from Soils with Toxic Air Contaminants:** Rule 1466 was adopted to establish requirements to minimize offsite fugitive particulate matter (PM10) emissions that contain certain toxic air contaminants (TACs) from earth-moving activities at sites within SCAQMD jurisdiction that have been designated by the United States Environmental Protection Agency (U.S. EPA), the California Department of Toxic Substances Control (DTSC), the California Environmental Protection Agency's (CalEPA's) State Water Resources Control Board or Regional Water Quality Control Board. Rule 1466 requirements would also apply to any site conducting earth-moving activities of soil containing certain toxic air contaminants that is identified by the SCAQMD's Executive Officer. Rule 1466 established a PM10 ambient dust limit and dust control measures at Rule 1466 applicable sites, and would require notification to the Executive Officer when earthmoving operations begin or PM10 emission limits are not met. Rule 1466 applicable sites will be required to install and maintain signage to inform the community and discourage unauthorized access. Rule 1466 also includes additional requirements to limit earthmoving activities for sites at schools and early education centers during certain hours when children are present. In situations where additional regulatory flexibility is necessary, Rule 1466 allows alternative dust control measures if approved by the Executive Officer. A Final EA was prepared for the project and the analysis concluded that there would be no significant adverse environmental impacts. Since no significant adverse environmental impacts were identified, no alternatives analysis and no mitigation measures were required by CEQA. Mitigation measures were not made a condition of the approval of this project and a Mitigation Monitoring and Reporting Plan under Public Resources Code Section 21081.6 and CEQA Guidelines Section 15097 was not adopted for this project. Findings, pursuant to CEQA Guidelines Section 15091, and a Statement of Overriding Considerations, pursuant to Public Resources Code Section 21081.6 and CEQA Guidelines Section 15093, were not adopted for this project. The SCAQMD Governing Board certified the Final EA and approved the project.

Estimated Emission Reductions: Implementation of Rule 1466 will reduce the exposure to certain toxic air contaminants during earthmoving activities. Emission reductions of specific toxic air contaminants could not be quantified. *Cost Effectiveness:* Not applicable. *CEQA Alternatives:* None, not required. *Socioeconomic Impact:* See Socioeconomic Impact Analysis section. *Source(s) of Funding:* Emission Fees, and Annual Operating Fees.

- 2. Amended Rule 1118 – Control of Emissions From Refinery Flares:** Rule 1118 was amended to: 1) harmonize Rule 1118 with key updates from US EPA’s recent Refinery Sector Rule update regarding flares, including new prohibitions on some types of flaring; 2) require facilities subject to Rule 1118 to prepare a Scoping Document that evaluates the feasibility of minimizing or avoiding planned and unplanned flaring events; 3) remove the \$4 million annual cap on mitigation fees that facilities may pay for flaring; 4) update emission factors based on US EPA’s updated AP-42 guidance; and 5) update and clarify reporting requirements for facilities. In addition, SCAQMD staff is proposing to allocate up to \$100,000 from the Rule 1118 Mitigation Fund to upgrade the web-based Flare Event Notification System. The project was determined to be exempt from CEQA and a Notice of Exemption was filed with the County Clerks of Los Angeles, Orange, Riverside and San Bernardino counties. Since the project was determined to be exempt from CEQA, no alternatives analysis was required. The SCAQMD Governing Board approved the project as proposed.

Estimated Emission Reductions: Emission reductions were not quantified, but removing the mitigation fee cap is expected to provide a stronger incentive to minimize flaring for those facilities that have exceeded the annual mitigation fee cap in the past. *Cost Effectiveness:* Not applicable. *CEQA Alternatives:* None, not required. *Socioeconomic Impact:* See Socioeconomic Impact Analysis section. *Source(s) of Funding:* Emission Fees, and Annual Operating Fees.

- 3. Amended Rule 1147 – NO_x Reductions from Miscellaneous Sources:** Rule 1147 was amended to resolve compliance issues that have been raised by stakeholders by: 1) removing the requirement to comply with the NO_x emission limit for units with a heat input rating of less than 325,000 British Thermal Units per hour; 2) changing the NO_x emission limit for low temperature afterburners, burn-off ovens, incinerators, and related equipment from 30 ppm to 60 ppm; 3) changing the compliance date for small in-use units with NO_x 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 or retrofit; 4) changing 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; 5) adding a testing exemption for ultra-low NO_x infrared burners; 6) providing compliance flexibility for low emission units by clarifying options for demonstrating emissions less than one pound per day; 7) adding an exemption for units with NO_x emission less than one pound per day when a company relocates a facility and remains under the same ownership; 8) adding an exemption for units that become subject to Rule 1147 upon amendment of Rule 219 on or after May 5, 2017, until the unit is replaced; 9) adding flexibility for demonstrating compliance with emission limits by including an alternative compliance demonstration option based on a manufacturer's performance guarantee; 10) clarifying an exemption for food ovens; and 11) clarifying an exemption for flare type systems. Other minor changes were also made for clarity and consistency throughout the rule. Rule 1147 was estimated to result in NO_x emission reductions foregone of up to 0.9 ton per day in 2017. However, while most of the estimated NO_x 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_x emission reductions foregone will be permanent. A Final Subsequent EA was prepared

for the project and the analysis concluded that the project would have significant unavoidable air quality impacts during operation because the quantity of emission reductions foregone would exceed the SCAQMD's significance operational threshold for NOx. Without available compliant technology for the affected equipment, the originally projected NOx emission reductions cannot be achieved and no mitigation measures were identified that would eliminate or reduce the significant NOx emissions foregone to less than significant levels. Because no mitigation measures have been identified that would reduce the significant adverse impacts to less than significant levels, mitigation measures were not made a condition of approval of this project. Thus, a Mitigation Monitoring and Reporting Plan under Public Resources Code Section 21081.6 and CEQA Guidelines Section 15097 was not required or adopted for this project. Findings were made pursuant to CEQA Guidelines Section 15091. A Statement of Overriding Considerations, prepared pursuant to Public Resources Code Section 21081.6 and CEQA Guidelines Section 15093, was also adopted for this project.

Since significant adverse environmental impacts were identified, an alternatives analysis was required by CEQA and prepared that included the following alternatives:

Alternative A - No Project: 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 September 2011 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 NOx 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 that is provided in the project. 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 NOx emission reductions foregone are expected to occur starting in 2017 as older equipment gets replaced or retrofitted over time. The NOx emission reductions foregone are expected to be recovered each year based on approximately 0.9 ton per day from compliance year 2017 to 2039.

Alternative C - Less Stringent Alternative (No Age Requirement, Exempt Pressure Washers 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 project. 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 NOx emission limits over the time period of 35 years starting in 2017. Recovery of the NOx emission reductions foregone are expected to occur starting in 2017 as older equipment gets replaced or retrofitted over time. Most NOx emission reductions foregone are expected to be recovered each year based on approximately 0.9 ton/day from compliance year 2017 to 2049.

Further, the total additional permanent NOx emission reductions foregone is estimated to be 36 pounds per day from exempting a small number of pressure washers (estimated to be about 10 new units) plus 49 pounds per day from exempting all units (regardless of temperature) with burners less than 325,000 BTU/hour (estimated to be less than 82 new units) when compared to the project.

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.

The SCAQMD Governing Board certified the Final Subsequent EA and approved the project.

Estimated Emission Reductions: 0.9 tpd NOx foregone by 2017 (This amendment delayed a compliance date, so these values represent emission reductions foregone for a previous compliance date). *Cost Effectiveness:* Not applicable. *CEQA Alternatives:* Four alternatives were analyzed, alternatives described above. *Socioeconomic Impact:* None, because this amendment does not result in any additional cost or other socioeconomic impact. *Source of Funding:* Emission Fees, and Annual Operating Fees.

AUGUST 2017

There was no Governing Board meeting in August, so no rules were adopted or amended.

SEPTEMBER 1, 2017

One rule was amended in September, as follows:

- 1. Amended Rule 1401 – New Source Review of Toxic Air Contaminants:** Rule 1401 was amended to: remove the exemption of spray booths and gasoline dispensing facilities and require them to begin using the SCAQMD Risk Assessment Procedures (Version 8.1), which incorporates: 1) 2015 Office of Environmental Health Hazard Assessment (OEHHA) Guidelines; 2) revised gasoline dispensing emission factors and speciation profiles; and 3) current air dispersion model (AERMOD) and updated

meteorological data. Additionally, the amendments to Rule 1401 updated the list of toxic air contaminants in Table I of Rule 1401 to be consistent with the current list used by OEHHA. The project was determined to be exempt from CEQA and a Notice of Exemption was filed with the County Clerks of Los Angeles, Orange, Riverside and San Bernardino counties. Since the project was determined to be exempt from CEQA, no alternatives analysis was required. The SCAQMD Governing Board approved the project as proposed.

Estimated Emission Reductions: None. *Cost Effectiveness:* Not applicable. *CEQA Alternatives:* None, not required. *Socioeconomic Impact:* See Socioeconomic Impact Analysis section. *Source(s) of Funding:* Permit Fees, Emission Fees, and Annual Operating Fees.

OCTOBER 6, 2017

One rule was amended in October, as follows:

- 1. Amended Rule 1168 - Adhesive and Sealant Applications:** Rule 1168 was amended to reduce emissions of VOCs, toxic air contaminants, and stratospheric ozone-depleting compounds from adhesives, adhesive primers, sealants, and sealant primers. The amendments to Rule 1168 clarified the applicability; revised, deleted, and added various definitions; lowered the VOC limits for certain categories and allowed a three-year sell-through and use-through; added new product categories with corresponding VOC content limits; required products marketed for use under varying categories to be subject to the lowest VOC limit; prohibited the storage of non-compliant products, unless for shipment outside of the SCAQMD; added test methods for analyzing VOC content; added labeling requirements; included reporting requirements for manufacturers, private labelers, big box retailers, distribution centers, and facilities that use a 55 gallon per year exemption; prohibited the use of Rule 102 Group II exempt solvents, except volatile methyl siloxanes; included a technology assessment for certain product categories; removed, modified, or added various exemptions. Rule 1168 was estimated to result in approximately 1.38 tons per day of VOC emission reductions. A Final EA was prepared and the analysis concluded that there would be no significant adverse environmental impacts. Since no significant adverse environmental impacts were identified, no alternatives analysis was required by CEQA and no mitigation measures were required by CEQA. Mitigation measures were not made a condition of the approval of this project and a Mitigation Monitoring and Reporting Plan under Public Resources Code Section 21081.6 and CEQA Guidelines Section 15097 was not adopted for this project. Findings, pursuant to CEQA Guidelines Section 15091, and a Statement of Overriding Considerations, pursuant to Public Resources Code Section 21081.6 and CEQA Guidelines Section 15093, were not adopted for this project. The SCAQMD Governing Board certified the Final EA and approved the project.

The SCAQMD Governing Board certified the Final EA and approved the project as proposed.

Estimated Emission Reductions: 1.38 tpd VOC by 2023. *Cost Effectiveness:* \$12,400 per ton of VOC reduced. *CEQA Alternatives:* None, not required. *Socioeconomic*

Impact: See Socioeconomic Impact Analysis section. *Source(s) of Funding:* Emission Fees.

NOVEMBER 3, 2017

One rule was adopted in November, as follows:

- 1. Adopted Rule 415 - Odors from Rendering Facilities:** Rule 415 was adopted to reduce odors from facilities conducting rendering operations. New Rule 415 was the result of an issue that was identified by the working group for the Clean Communities Plan (CCP) in the pilot study area of Boyle Heights. The prevalence of odors from rendering facilities in Vernon, directly south of Boyle Heights, was of great concern to the working group. Rule 415 requires existing rendering facilities to enclose certain rendering operations, install odor emission control equipment for the enclosures or use alternative standards for a permanent total enclosure for raw material receiving area, and carry out best management practices (BMPs). A Final EA was prepared and the analysis concluded that there would be no significant adverse environmental impacts. Since no significant adverse environmental impacts were identified, no alternatives analysis was required by CEQA and no mitigation measures were required by CEQA. Mitigation measures were not made a condition of the approval of this project and a Mitigation Monitoring and Reporting Plan under Public Resources Code Section 21081.6 and CEQA Guidelines Section 15097 was not adopted for this project. Findings, pursuant to CEQA Guidelines Section 15091, and a Statement of Overriding Considerations, pursuant to Public Resources Code Section 21081.6 and CEQA Guidelines Section 15093, were not adopted for this project. The SCAQMD Governing Board certified the Final EA and approved the project as proposed.

Estimated Emission Reductions: Implementation is expected to reduce odors from rendering facilities, but odors cannot be quantified. *Cost Effectiveness:* Not applicable. *CEQA Alternatives:* None, not required. *Socioeconomic Impact:* See Socioeconomic Impact Analysis section. *Source of Funding:* Permit Fees, Emission Fees, and Annual Operating Fees.

DECEMBER 1, 2017

One rule was adopted and two rules were amended in December, as follows:

- 1. Adopted Rule 1180 – Refinery Fenceline and Community Air Monitoring and Rule 1180 Refinery Fenceline Air Monitoring Plan Guidelines (Guidelines):** Rule 1180 and the accompanying Guidelines were adopted to implement Health and Safety Code Section 42705.6 by requiring petroleum refineries to collect continuous data of refinery air pollutant emissions, at or near their property boundaries, and to provide that data as quickly as possible to the public. In particular, Rule 1180 contains requirements for petroleum refineries to install and operate continuous, fenceline air monitoring systems to monitor a comprehensive list of criteria pollutants and toxic air contaminants in real-time. Rule 1180 also establishes a fee schedule, to be paid by the petroleum refineries, for the cost of designing, developing, installing, operating and maintaining refinery-related community air monitoring systems. Rule 1180 exempts petroleum refineries that have a maximum capacity to process less than 40,000 barrels per day of crude oil. The project

was determined to be exempt from CEQA and a Notice of Exemption was filed with the County Clerks of Los Angeles, Orange, Riverside and San Bernardino counties. Since the project was determined to be exempt from CEQA, no alternatives analysis was required. The SCAQMD Governing Board approved the project as proposed.

Estimated Emission Reductions: None. *Cost Effectiveness:* Not applicable. *CEQA Alternatives:* None, not required. *Socioeconomic Impact:* See Socioeconomic Impact Analysis section. *Source(s) of Funding:* Emission Fees, and Annual Operating Fees.

- 2. Amended Rule 1466 - Control of Particulate Emissions from Soils with Toxic Air Contaminants:** Rule 1466 was amended to address the Governing Board's Resolution directing staff to expand the list of applicable toxic air contaminants. The amendments to Rule 1466: 1) expanded the list of applicable toxic air contaminants to include pesticides, herbicides, and persistent bio-accumulative toxics; 2) expanded applicability to other government designated sites; and 3) included language to clarify existing provisions. The sites that may be affected by Rule 1466 have been designated as cleanup sites on lists compiled by the United States Environmental Protection Agency, the California Department of Toxic Substances Control (DTSC), the California Environmental Protection Agency's State Water Resources Control Board or Regional Water Quality Control Board, and other county, local, or state regulatory agencies. A Final Subsequent EA was prepared for the project and the analysis concluded that there would be no significant adverse environmental impacts. Since no significant adverse environmental impacts were identified, no alternatives analysis was required by CEQA and no mitigation measures were required by CEQA. Mitigation measures were not made a condition of the approval of this project and a Mitigation Monitoring and Reporting Plan under Public Resources Code Section 21081.6 and CEQA Guidelines Section 15097 was not adopted for this project. Findings, pursuant to CEQA Guidelines Section 15091, and a Statement of Overriding Considerations, pursuant to Public Resources Code Section 21081.6 and CEQA Guidelines Section 15093, were not adopted for this project. The SCAQMD Governing Board certified the Final EA and approved the project as proposed

Estimated Emission Reductions: Implementation of Rule 1466 will reduce the exposure to the additional toxic air contaminants added during this amendment for earthmoving activities. Emission reductions of specific toxic air contaminants could not be quantified. *Cost Effectiveness:* Not applicable. *CEQA Alternatives:* None, not required. *Socioeconomic Impact:* See Socioeconomic Impact Analysis section. *Source(s) of Funding:* Emission Fees.

- 3. Amended Rule 1420 – Emissions Standard for Lead:** Rule 1420 was amended to reduce public health impacts from point and fugitive lead emissions from metal melting or lead processing facilities by reducing the exposure to lead, and to ensure and maintain attainment of the National Ambient Air Quality Standard (NAAQS) for lead within the South Coast Air Basin. The amendments to Rule 1420 include an initial ambient air lead concentration limit of 0.150 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) averaged over 30 consecutive days and will be lowered to a final limit of 0.100 $\mu\text{g}/\text{m}^3$ by January 1, 2021. The amendments to Rule 1420 also added new requirements for point source lead

emission controls, along with periodic source testing, emission control device monitoring, conditional ambient air monitoring, and reporting and recordkeeping requirements to ensure continuous compliance. To prevent fugitive lead emissions, Rule 1420 also added new requirements to conduct housekeeping and maintenance activities and to install total enclosures in areas where lead processing operations and associated processes are being conducted. Any facility that exceeds the limits in Rule 1420 will be subject to additional mitigation requirements. A Final EA was prepared and the analysis concluded that there would be no significant adverse environmental impacts. Since no significant adverse environmental impacts were identified, no alternatives analysis was required by CEQA and no mitigation measures were required by CEQA. Mitigation measures were not made a condition of the approval of this project and a Mitigation Monitoring and Reporting Plan under Public Resources Code Section 21081.6 and CEQA Guidelines Section 15097 was not adopted for this project. Findings, pursuant to CEQA Guidelines Section 15091, and a Statement of Overriding Considerations, pursuant to Public Resources Code Section 21081.6 and CEQA Guidelines Section 15093, were not adopted for this project. The SCAQMD Governing Board certified the Final EA and approved the project.

Estimated Emission Reductions: Although emission reduction of lead point and fugitive emissions cannot be quantified, lowering the ambient concentration limit and implementing provisions in Rule 1420 will result in reductions of lead emissions and exposure to lead from Rule 1420 facilities. *Cost Effectiveness:* Not applicable. *CEQA Alternatives:* None, not required. *Socioeconomic Impact:* See Socioeconomic Impact Analysis section. *Source(s) of Funding:* Permit Fees, Emission Fees, and Annual Operating Fees.

CEQA LEAD AGENCY PROJECTS

SCAQMD also acts as the Lead Agency under CEQA for non-SCAQMD projects where SCAQMD typically has primary approval, i.e., discretionary permitting authority. Under CEQA, the Lead Agency is responsible for determining whether an EIR, ND, or other type of CEQA document is necessary for any proposal considered to be a “project” as defined by CEQA. Further, the Lead Agency is responsible for preparing the environmental analysis, complying with all procedural requirements of CEQA, and approving the environmental documents. All documents prepared by SCAQMD for permit projects are subject to the standard CEQA requirements. SCAQMD staff is responsible for preparing or reviewing prepared CEQA documents for stationary source permit projects. In 2017, three lead agency projects with corresponding CEQA documents were approved by the SCAQMD’s Executive Officer, as summarized below.

1. Addendum to the March 2007 Final Mitigated Negative Declaration for Southern California Edison: Grapeland (formerly named Etiwanda) Peaker Project, Rancho Cucamonga (project approved January 27, 2017)

Southern California Edison operators proposed additional changes to their project previously evaluated and adopted in the Final Mitigated Negative Declaration (MND) for

the Southern California Edison Grapeland (formerly named Etiwanda) Peaker Project in Rancho Cucamonga on March 1, 2007, herein referred to as the March 2007 Final MND. The project evaluated in the March 2007 Final MND was for the installation of a General Electric natural gas-fired turbine generator, also referred to as a “peaker” unit, plus an air pollution control system comprised of a selective catalytic reduction (SCR) unit and oxidation catalyst to reduce emissions to levels that meet or exceed all applicable local air quality emission standards. The peaker is capable of producing up to 45 megawatts (MW) of electricity on short notice during periods when the local electrical system needs power and local voltage support.

Subsequent to the adoption of the March 2007 Final MND, Southern California Edison operators proposed to modify the peaker turbine’s air pollution control system to: 1) decrease the water-injection rate into the turbine’s combustor by up to 42 percent; 2) replace the oxidation catalyst; 3) replace the SCR catalyst and increase the overall size of the SCR catalyst beds without increasing the size (outside dimensions) of the enclosure of the SCR air pollution control system; 4) replace the ammonia injection grid (AIG) to improve the deliverability of ammonia to the catalyst; and, 5) increase the concentration of the aqueous ammonia that is delivered to the facility, stored on-site, and injected into the SCR from 19 percent to 29 percent. In addition, to increase the operating flexibility of the peaker so that it can provide reliable power to the grid when dispatched by the California Independent System Operator (CAISO) during peak times when renewable energy resources are not available, Southern California Edison operators proposed to revise its SCAQMD Title V Operating Permit to allow the turbine to generate power over its full operating range, from less than one MW to full load, while continuing to meet the emission limits in the current permit without increasing: 1) utilization of the Grapeland Peaker for power generation; 2) fuel-input limits, generation capacity, or the heat rate of the turbine; and, 3) the potential to emit of criteria pollutants, greenhouse gases (GHGs), or toxic air contaminants (TACs).

The Addendum to the March 2007 Final MND concluded that the proposed modifications to the original project previously analyzed in the March 2007 Final MND would not create any new significant adverse environmental impacts or substantially increase the severity of significant effects previously identified. The mitigation measures that were made a condition of approval of the original project analyzed in the March 2007 Final MND and the corresponding Mitigation Monitoring and Reporting Plan that was adopted at that time will remain in effect. No new or modified mitigation measures were made a condition of the approval of this project. Findings and a Statement of Overriding Considerations were not made a condition of approval of the original project analyzed in the March 2007 Final MND since no significant adverse impacts were identified that could not be mitigated to less than significant.

2. Addendum to the April 2007 Final Mitigated Negative Declaration for Southern California Edison: Center Peaker Project, Norwalk (project approved February 9, 2017)

Southern California Edison operators proposed additional changes to their project previously evaluated and adopted in the Final Mitigated Negative Declaration (MND) for the Southern California Edison Center Peaker Project in Norwalk on April 3, 2007,

herein referred to as the April 2007 Final MND. The project evaluated in the April 2007 Final MND was for the installation of a General Electric natural gas-fired turbine generator, also referred to as a “peaker” unit, plus an air pollution control system comprised of a selective catalytic reduction (SCR) unit and oxidation catalyst to reduce emissions to levels that meet or exceed all applicable local air quality emission standards. The peaker is capable of producing up to 45 MW of electricity on short notice during periods when the local electrical system needs power and local voltage support.

Subsequent to the adoption of the April 2007 Final MND, Southern California Edison operators proposed to modify the peaker turbine’s air pollution control system to: 1) decrease the water-injection rate into the turbine’s combustor by up to 48 percent; 2) replace the oxidation catalyst; 3) replace the SCR catalyst and increase the overall size of the SCR catalyst beds without increasing the size (outside dimensions) of the enclosure of the SCR air pollution control system; 4) replace the ammonia injection grid (AIG) to improve the deliverability of ammonia to the catalyst; and, 5) increase the concentration of the aqueous ammonia that is delivered to the facility, stored on-site, and injected into the SCR from 19 percent to 29 percent. In addition, to increase the operating flexibility of the peaker so that it can provide reliable power to the grid when dispatched by the California Independent System Operator (CAISO) during peak times when renewable energy resources are not available, Southern California Edison operators proposed to revise its SCAQMD Title V Operating Permit to allow the turbine to generate power over its full operating range, from less than one MW to full load, while continuing to meet the emission limits in the current permit without increasing: 1) utilization of the Center Peaker for power generation; 2) fuel-input limits, generation capacity, or the heat rate of the turbine; and, 3) the potential to emit of criteria pollutants, greenhouse gases (GHGs), or toxic air contaminants (TACs).

The Addendum to the April 2007 Final MND concluded that the proposed modifications to the original project previously analyzed in the April 2007 Final MND would not create any new significant adverse environmental impacts or substantially increase the severity of significant effects previously identified. The mitigation measures that were made a condition of approval of the original project analyzed in the April 2007 Final MND and the corresponding Mitigation Monitoring and Reporting Plan that was adopted at that time will remain in effect. No new or modified mitigation measures were made a condition of the approval of this project. Findings and a Statement of Overriding Considerations were not made a condition of approval of the original project analyzed in the April 2007 Final MND since no significant adverse impacts were identified that could not be mitigated to less than significant.

3. Final Environmental Impact Report for the Tesoro Los Angeles Refinery Integration and Compliance Project (certified on May 12, 2017)

The Tesoro Refining and Marketing Company LLC proposed the Los Angeles Refinery Integration and Compliance Project. The Final Environmental Impact Report (EIR) evaluated the proposed modifications necessary to more fully integrate the Tesoro Los Angeles Refinery - Carson and Wilmington Operations which operate as the Tesoro Los Angeles Refinery (Refinery). The Refinery includes: 1) the Wilmington Operations located at 2101 East Pacific Coast Highway in the Wilmington District of the City of Los

Angeles; and 2) the Carson Operations, which is the former BP Carson Refinery located at 2350 East 223rd Street in the City of Carson.

In addition to further Refinery integration, the project was designed to comply with the federally-mandated Tier 3 gasoline specifications and with State and local regulations mandating emission reductions. The Los Angeles Refinery Integration and Compliance Project was estimated to substantially reduce greenhouse gas (GHG), sulfur oxides (SO_x), nitrogen oxides (NO_x), carbon monoxide (CO), and particulate matter (PM) emissions at the Refinery by accomplishing the following: 1) reconfiguring the combined Refinery complex to enable shutting down the Fluid Catalytic Cracking Unit (FCCU) at the Wilmington Operations; 2) installing interconnecting pipelines; 3) reconfiguring the combined Refinery complex to improve the gasoline to distillate production ratio from the integrated Refinery in order to expeditiously respond and adjust to ongoing changes in market demand for various types of petroleum products; and 4) optimizing the ability to recover heat by installing new heat exchangers and modifying specified units to further minimize criteria pollutant and GHG emissions. All new and modified stationary sources with emission increases were required to comply with Best Available Control Technology (BACT) requirements in South Coast Air Quality Management District (SCAQMD) Rule 1303. Additionally, marine vessel emissions were shown to be reduced due to the construction of six new 500,000 barrel tanks at the Carson Crude Terminal and replacing two existing 80,000 barrel tanks with 300,000 barrel tanks at the Wilmington Operations.

The Final EIR concluded that the project would have significant unavoidable adverse impacts on the environment related to construction emissions on air quality and hazards and hazardous materials impacts during operation. Mitigation measures were made a condition of the approval of this project and a Mitigation Monitoring and Reporting Plan under Public Resources Code Section 21081.6 and CEQA Guidelines Section 15097 was adopted for this project. Findings were made pursuant to CEQA Guidelines Section 15091. A Statement of Overriding Considerations, prepared pursuant to Public Resources Code Section 21081.6 and CEQA Guidelines Section 15093, was also adopted for this project.

SOCIOECONOMIC IMPACT ANALYSES

California Health and Safety Code Section 40440.8 requires that SCAQMD perform socioeconomic impact assessments for its rules and regulations that will significantly affect air quality or emissions. Prior to the requirements of Section 40440.8, SCAQMD staff had been evaluating the socioeconomic impacts of its actions pursuant to a 1989 resolution of its Governing Board. Additionally, SCAQMD staff assesses socioeconomic impacts of CEQA alternatives to those rules with significant cost and emission reduction impacts.

The elements of socioeconomic impact assessments include direct effects on various types of affected industries in terms of control costs and cost effectiveness as well as public health benefits associated with Air Quality Management Plans (AQMPs). Additionally, SCAQMD staff uses an economic model developed by Regional Economic Models, Inc. (REMI) to analyze the potential direct and indirect socioeconomic impacts of SCAQMD rules on Los

Angeles, Riverside, Orange, and San Bernardino Counties. These impacts include, but are not limited to employment and competitiveness.

In 2017, four new rules were adopted, and eight rules and one regulation were amended. Out of these, nine had socioeconomic impacts. Additionally, one rule, Rule 320, did not undergo any amendments that were brought to the SCAQMD Governing Board, but because it contains a requirement for an automatic annual California Consumer Price Index (CPI) adjustment that has associated socioeconomic impacts, this rule has also been included in this summary.

Lastly, the 2016 AQMP was adopted at the March 3, 2017 Governing Board Meeting. In 2016, staff prepared a Draft Socioeconomic Assessment (along with an assessment methodology) in order to inform decision-makers and stakeholders about the potential costs and benefits of the 2016 AQMP and how the associated socioeconomic impacts would affect communities within the region. In 2017, staff prepared the Final Socioeconomic Assessment of the 2016 AQMP which included three final documents: 1) main report containing final estimates of benefits, costs, and regional economic impacts, 2) appendices, and 3) responses to comments.

Rule Adoptions and Amendments with Socioeconomic Impacts

Adopted Rule 1430 – Control of Emissions from Metal Grinding Operations at Metal Forging Facilities (March 2017)

Rule 1430 was adopted to reduce particulate matter and toxic emissions and help to reduce odors from metal grinding and cutting operations at forging facilities. Prior to the adoption of Rule 1430, metal grinding and cutting operations were exempt from SCAQMD permits. Based on monitoring, sampling, and site visits, metal grinding at forging facilities were identified as a substantial source of metal particulate emissions, some of which are also toxic air contaminants. Under Rule 1430, forging facilities are: 1) prohibited from conducting grinding and cutting operations in the open air; 2) required to vent metal grinding and cutting operations to emission control devices that meet specified emission standard levels; 3) required to conduct metal grinding and cutting operations in a building enclosure to reduce fugitive emissions; and 4) required to implement a series of housekeeping measures to further minimize fugitive emissions.

The main requirements in Rule 1430 that were concluded to have cost impacts for affected facilities were the installation of baghouses with HEPA filters (point-source controls on existing and new enclosures) and the upgrading of an existing building to a total enclosure or construction of a new total enclosure. Some facilities will be required to add negative air to a total enclosure by venting it to pollution controls depending on a facility's proximity to sensitive receptors, schools and early education schools. The annual compliance costs of Rule 1430 were estimated to range from \$6.0 to \$6.2 million, depending on the real interest assumed (one to four percent). Press Forge, a metal forging facility located in the City of Paramount, California, would bear the largest share of annual compliance costs (14 percent or approximately \$875 K annually based on a four percent real interest) due to the

installation of a total enclosure with negative air that is necessary based on the facility's proximity to a sensitive receptor, school and early education school.

SCAQMD does not conduct a dollar per ton cost effectiveness for toxics regulations since many other factors besides the amount of pollution affects the health impacts such as the toxic potency and the location of receptors. Rule 1430 regulates toxics and as such the cost effectiveness analysis is not applicable here. Implementation of Rule 1430 is expected to result in approximately 46 jobs foregone annually between 2017 and 2035 when a four percent interest rate is assumed (approximately 44 jobs with a one percent real interest rate). The projected job impacts represent about 0.001 percent of the total employment in the four-county region.

Amended Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II; and Amended Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II (May 2017)

Unless exempted under Rule 219, any affected equipment requiring a written permit is subject to a one-time permit processing fee when applying for a permit, and annual operating and flat emissions fees thereafter. Rule 219 was amended to exempt the following additional equipment and/or processes from the requirement to obtain a SCAQMD permit because they emit very small levels of criteria pollutants and have minimal toxic emission profiles: engines at remote 2-way radio towers fueled with liquefied propane gas or compressed natural gas; sub-slab ventilation systems; passive carbon filter odor control of food waste slurry storage tanks; hand-held plasma-arc cutting and laser cutting equipment; separation/segregation of plastic materials for recycling without cutting, shredding, grinding, or odors; certain coffee roasting equipment; small batch breweries; and equipment used for dehydrated meat manufacturing. In addition, Rule 219 was amended to remove existing exemptions for the following equipment and/or processes because they have the potential to emit criteria pollutants at greater than de minimis levels, emit toxic air contaminants of concern, or create a nuisance: cutting of stainless steel and alloys containing toxics; portable asphalt recycling equipment; greenwaste shredding or grinding; separation/segregation of plastic materials that involves cutting, shredding, grinding or odors; recycling of expanded polystyrene; equipment used for cleaning of diesel particulate filters; certain surface preparation tanks with toxic emissions; certain plating, stripping or anodizing tanks with toxic emissions; and paper, carpet, and fabric recycling operations. Other amendments to Rule 219 included minor clarifications and editorial corrections for food oven combustion equipment, fuel cells, charbroilers, barbeque grills and other underfired grills, VOC-containing liquid storage and transfer equipment, quench tanks for heat treating operations, pavement striping, and certain printing, coating and drying operations.

Rule 222 was amended to add the following equipment to the SCAQMD Rule 222 filing program in lieu of requiring a written SCAQMD permit because they have been identified as small sources of emissions: industrial cooling towers located in a chemical plant, refinery or other industrial facility; natural gas transfer pumps and natural gas repressurization equipment; and engines registered under the statewide Portable Equipment Registration Program (PERP) used in the Outer Continental Shelf (OCS). Storage tanks of aqueous urea

solutions and certain natural gas and crude oil production equipment were also exempted from Rule 219 but were included in the Rule 222 filing program.

Implementation of amended Rule 219 was concluded to increase costs for some facilities and decrease costs for other facilities. Using a very conservative methodology, the analysis concluded that up to 174 pieces of equipment may need to obtain a written permit due to the loss of a current exemption, and 89 pieces of equipment would qualify for an exemption from future permitting and annual operating fees. In addition, approximately 300 pieces of equipment would require to be registered under amended Rule 222. The total annualized cost associated with amended Rules 219 and 222 are \$38,125 and \$69,197, respectively. The majority of costs (~85 percent) are associated with permitting sources of toxics emissions under amended Rule 219, and the majority of costs (~64 percent) are associated with industrial cooling towers (in conjunction with the 2016 AQMP) under amended Rule 222.

It has been a standard socioeconomic practice that, when the annual compliance cost is less than one million current U.S. dollars, the Regional Economic Impact Model (REMI) is not used to simulate jobs and macroeconomic impacts, because the resultant impacts would be diminutive relative to the baseline regional economy. Since the estimated annualized costs were \$38,125 and \$69,197, a REMI analysis was not conducted.

Adopted Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants (July 2017)

Rule 1466 was adopted to establish requirements to minimize offsite fugitive particulate matter (PM10) emissions that contain certain toxic air contaminants (TACs) from earth-moving activities at sites within SCAQMD jurisdiction that have been designated by the United States Environmental Protection Agency (U.S. EPA), the California Department of Toxic Substances Control (DTSC), the California Environmental Protection Agency's (CalEPA's) State Water Resources Control Board or Regional Water Quality Control Board. Rule 1466 requirements would also apply to any site conducting earth-moving activities that is identified by the SCAQMD's Executive Officer. Rule 1466 established a PM10 ambient dust limit and dust control measures at Rule 1466 applicable sites, and would require notification to the Executive Officer when cleanup operations begin or PM10 emission limits are not met. Rule 1466 applicable sites will be required to install and maintain signage to inform the community and discourage unauthorized access. Rule 1466 also includes additional requirements to limit cleanup activities for sites at schools and early education centers. In situations where additional regulatory flexibility is necessary, Rule 1466 allows alternative dust control measures if approved by the Executive Officer.

For the purpose of conducting a socioeconomic analysis for Rule 1466, it was assumed that an average of eight toxic cleanup sites ($25 \text{ sites} \div 3 \text{ years} \approx 8 \text{ sites}$), with an average size of eight acres per site ($198 \text{ acres} \div 25 \text{ sites} \approx 8 \text{ acres}$) would be potentially subject to Rule 1466 on an annual basis. Based on time spent on earthmoving activities from a sample of sites staff assumed an average period of three months for earth-moving activities for this scenario. Additionally, this scenario also takes into account the fact that many sites may have already employed some of the dust control measures contained in Rule 1466 in accordance with existing SCAQMD rules and requirements from other agencies. For example, many sites have already put fencing and windscreens in place or PM10 monitors in accordance with the

California Department of Toxics Substances Control (DTSC) requirements or vehicle egress measures and on-site compliance supervisor in accordance with SCAQMD Rule 403. Staff calculated the percentage of sites which already use particular dust control measures, monitoring equipment, or undertake required activities in order to estimate the portion of Rule 1466 requirements which are incremental to this baseline.

Based on this scenario, the estimated total regional annual compliance cost was found to be about \$731,000. A range of cost per average-sized site was also calculated to provide further information about what cost of this proposed rule for a single site would be. A low cost site, which already has employed an on-site dust control supervisor, and equipment like PM10 monitors and fencing with windscreens, would have cost of about \$31,000. While a high cost site, which has not already employed any of the required measures would have a cost of about \$161,000.

It has been standard practice for SCAQMD socioeconomic analysis that when the annual compliance cost is less than one million current U.S. dollars, REMI is not used to simulate jobs and macroeconomic impacts. This is because the resultant impacts would be diminutive relative to the baseline regional economy. Since the estimated annualized cost of compliance with Rule 1466 was \$730,670, a REMI analysis was not conducted.

Amended Rule 1118 – Control of Emissions from Refinery Flares (July 2017)

Rule 1118 was amended to: 1) harmonize Rule 1118 with key updates from US EPA's recent Refinery Sector Rule update regarding flares, including new prohibitions on some types of flaring; 2) require facilities subject to Rule 1118 to prepare a Scoping Document that evaluates the feasibility of minimizing or avoiding planned and unplanned flaring events; 3) remove the \$4 million annual cap on mitigation fees that facilities may pay for flaring; 4) update emission factors based on US EPA's updated AP-42 guidance; and 5) update and clarify reporting requirements for facilities. In addition, SCAQMD staff is proposing to allocate up to \$100,000 from the Rule 1118 Mitigation Fund to upgrade the web-based Flare Event Notification System.

Amended Rule 1118 lowered flaring emissions and affected 12 facilities operating a total of 31 flares. Eight out of 12 facilities belong to the sector of petroleum refineries; of the remaining four, one sulfur recovery plant and three hydrogen production plants belong to the sector of industrial gas manufacturing. All the affected facilities are located in Los Angeles County and none are small businesses.

Two key amendments were identified as having potential cost impacts. First, preparation of a scoping document to evaluate the feasibility of emissions reductions from planned and unplanned flaring events could potentially cost \$50,000 for a non-refinery facility and \$250,000 for a refinery facility. These costs are one-time in nature and would add up to about \$2.2 million for all affected facilities. These Scoping Documents are necessary to identify feasible measures to further reduce emissions from flaring in a second phase of rulemaking. Second, the removal of the \$4 million annual cap on mitigation fees could potentially impose additional costs on affected facilities if their SOx emissions substantially exceed the performance target. Past performance records (2012-2016) for the 12 facilities

show that only one facility in 2015 would have exceeded the \$4 million cap (\$7.7 million) due to an explosion which caused a shutdown and subsequent atypical operations for the remainder of the year. Another occasion when the annual cap was exceeded was from an unmonitored bypass valve; this bypass valve has since been removed from service. Therefore, it is unlikely that the affected facilities would exceed the annual cap and pay more than \$4 million of mitigation fees.

It has been a standard socioeconomic practice that, when the annual compliance cost is less than one million current U.S. dollars, REMI is not used to simulate jobs and macroeconomic impacts. This is because the resultant impacts would be diminutive relative to the baseline regional economy. Since the overall annualized cost impacts of amended Rule 1118 were estimated at \$270,600, a REMI analysis was not conducted.

Amended Rule 1401 – New Source Review of Toxic Air Contaminants (September 2017)

Rule 1401 was amended to: remove the exemption of spray booths and gasoline dispensing facilities and require them to begin using the SCAQMD Risk Assessment Procedures (Version 8.1), which incorporates: 1) 2015 Office of Environmental Health Hazard Assessment (OEHHA) Guidelines; 2) revised gasoline dispensing emission factors and speciation profiles; and 3) current air dispersion model (AERMOD) and updated meteorological data. Additionally, the amendments to Rule 1401 updated the list of toxic air contaminants in Table I of Rule 1401 to be consistent with the current list used by OEHHA.

A socioeconomic analysis was conducted for amended Rule 1401. Based on staff's analysis of SCAQMD permits, two spray booths and one gasoline dispensing facility per year could potentially incur costs to comply with Rule 1401. Spray booths belong to various sectors of the economy such as manufacturing, wholesale, retail, services, and the affected gasoline dispensing facilities belong to the sector of retail services. The potentially affected facilities are likely to be small businesses.

Based on review of spray booths permitted between 2009 and 2014, an average of two spray booths per year are expected to need to install ultra-low particulate air (ULPA) filters instead of high efficiency particulate air (HEPA) filters to obtain new or modified permits pursuant to PAR 1401. While the filter costs are similar, ULPA filters require the use of a higher horsepower blower that is more expensive and uses more electricity. The resultant incremental costs for a total of two affected spray booths is estimated at \$7,450 over a five-year period. An average of one gasoline dispensing facility per year is expected to need to choose from various compliance options to obtain new permits pursuant to amended Rule 1401. It is assumed in this analysis that the affected facility would proceed to a Tier 4 Health Risk Assessment and incur a one-time cost of dispersion modeling of \$15,000. Other compliance options for permitting a new gasoline dispensing facility include lowering the requested throughput or reorienting equipment or siting the gasoline dispensing sources further from sensitive receptors. Therefore, the overall compliance cost is estimated at \$22,450 per year. Since the overall annualized cost of compliance with amended Rule 1401 is estimated at \$22,450, a REMI analysis was not conducted.

Amended Rule 1168 – Adhesive and Sealant Applications (October 2017)

Rule 1168 was amended to reduce emissions of VOCs, toxic air contaminants, and stratospheric ozone-depleting compounds from adhesives, adhesive primers, sealants, and sealant primers. The amendments to Rule 1168 clarified the applicability; revised, deleted, and added various definitions; lowered the VOC limits for certain categories and allowed a three-year sell-through and use-through; added new product categories with corresponding VOC content limits; required products marketed for use under varying categories to be subject to the lowest VOC limit; prohibited the storage of non-compliant products, unless for shipment outside of the SCAQMD; added test methods for analyzing VOC content; added labeling requirements; included reporting requirements for manufacturers, private labelers, big box retailers, distribution centers, and facilities that use a 55 gallon per year exemption; prohibited the use of Rule 102 Group II exempt solvents, except volatile methyl siloxanes; included a technology assessment for certain product categories; removed, modified, or added various exemptions. Rule 1168 was estimated to result in approximately 1.38 tons per day of VOC emission reductions.

Amended Rule 1168 would affect approximately 60 adhesive and sealant materials manufacturers of which eight are manufacturing products within the South Coast Air Basin (SCAB). Amended Rule 1168 would also affect six Big Box retailers, and approximately 40 distributors located in and outside of the SCAB. These affected facilities belong to the industries of asphalt shingle and coating materials and adhesive manufacturing, and the sectors of retail and merchant wholesalers. Amended Rule 1168 would also affect intermediate industrial users and end-users (general public) using products that are applicable to Rule 1168 and not regulated by CARB's Consumer Products Regulation.

None of the adhesive and sealant manufacturers and Big Box retailers that would be subject to Rule 1168 are considered small businesses under SCAQMD's definition of a small business. Most of the distributors and other industrial and commercial users that would be subject to Rule 1168 are likely to be small businesses.

It was assumed that Rule 1168 compliance costs are mainly for reformulation. The reformulation cost is estimated to range from \$2 to \$4 per gallon for the majority of affected product categories. The average total annual cost of the proposed amendments, which would be incurred by the affected facilities located in and outside of the SCAB, is estimated to be \$6.34 million, of which \$6.30 million is estimated for reformulation costs and the remaining \$0.04 is estimated for reporting costs. The cost-effectiveness of Rule 1168 is estimated at \$12,400 per ton of VOC reduced with an emission reduction of 1.4 tons of VOC per day by 2023. The amendments were projected to result in minimal job impacts across all major sectors of the regional economy.

Adopted Rule 415 – Odors from Rendering Facilities (November 2017)

Rule 415 was adopted to reduce odors from facilities conducting rendering operations. New Rule 415 was the result of an issue that was identified by the working group for the Clean Communities Plan (CCP) in the pilot study area of Boyle Heights. The prevalence of odors from rendering facilities in Vernon, directly south of Boyle Heights, was of great concern to

the working group. Rule 415 requires existing rendering facilities to enclose certain rendering operations, install odor emission control equipment for the enclosures or use alternative standards for a permanent total enclosure for raw material receiving area, and carry out best management practices (BMPs).

Rule 415 potentially affects five facilities with rendering operations, all classified under the industry of Rendering and Meat Byproduct Processing (NAICS 311613). All five facilities are clustered in close proximity in the urban portion of Los Angeles County, with four located in the heavily industrialized city of Vernon and one in the city of Los Angeles bordering the city of Vernon. Although the city of Vernon has just over 100 inhabitants, it is surrounded by many socioeconomically disadvantaged communities with high unemployment rates and disproportionately more children living in poverty than the county average.

The total annualized costs for the five affected facilities to comply with Rule 415 were estimated to range from \$405,000 to \$527,000 per year. One facility operated by a large company is expected to incur about two-thirds of the total estimated costs (annualized at \$256,000 to \$353,000), followed by a facility that is a small business, which would incur the remaining one-third (annualized at \$138,000 to \$160,000). The other three facilities, including another small business, together would incur less than three percent of the total estimated compliance costs. The estimated total compliance costs would result in a minimal jobs impact in the regional economy.

Adopted Rule 1180 – Refinery Fenceline and Community Air Monitoring and Rule 1180 Refinery Fenceline Air Monitoring Plan Guidelines (Guidelines) (December 2017)

Rule 1180 and the accompanying Guidelines were adopted to implement Health and Safety Code Section 42705.6 by requiring petroleum refineries to collect continuous data of refinery air pollutant emissions, at or near their property boundaries, and to provide that data as quickly as possible to the public. In particular, Rule 1180 contains requirements for petroleum refineries to install and operate continuous, fenceline air monitoring systems to monitor a comprehensive list of criteria pollutants and toxic air contaminants in real-time. Rule 1180 also establishes a fee schedule, to be paid by the petroleum refineries, for the cost of designing, developing, installing, operating and maintaining refinery-related community air monitoring systems. Rule 1180 exempts petroleum refineries that have a maximum capacity to process less than 40,000 barrels per day of crude oil.

Eight petroleum refineries located in Los Angeles County would be potentially affected by Rule 1180 and as such, incur compliance costs. None of the eight affected refineries are classified as small businesses. They all have a maximum capacity to process 40,000 or more barrels per day of crude oil and therefore would not qualify for the exemption provided in Rule 1180.

The fenceline air monitoring requirements were estimated to have an average annual cost of approximately \$3.6 million, while the community air monitoring fees were estimated to have an average annual cost of \$3.5 million, resulting in a total estimated annual compliance cost

of \$7.1 million. The facility-specific annual compliance cost was estimated to range from \$489,000 to \$1.5 million depending on the refinery's size and their specific fee schedule.

Implementation of Rule 1180 is projected to result in a net positive job impact of 35 jobs per year on average in the four-county region over the 2018-2028 time period, due to an increase in jobs in industries.

Amended Rule 1420 – Emissions Standard for Lead (December 2017)

Rule 1420 was amended to reduce public health impacts from point and fugitive lead emissions from metal melting or lead processing facilities by reducing the exposure to lead, and to ensure and maintain attainment of the National Ambient Air Quality Standard (NAAQS) for lead within the South Coast Air Basin. The amendments to Rule 1420 include an initial ambient air lead concentration limit of 0.150 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) averaged over 30 consecutive days and will be lowered to a final limit of 0.100 $\mu\text{g}/\text{m}^3$ by January 1, 2021. The amendments to Rule 1420 also added new requirements for point source lead emission controls, along with periodic source testing, capture efficiency testing, conditional ambient air monitoring, and reporting and recordkeeping requirements to ensure continuous compliance. To prevent fugitive lead emissions, Rule 1420 also added new requirements to conduct housekeeping and maintenance activities and to install total enclosures in areas where lead processing operations and associated processes are being conducted. Any facility that exceeds the limits in Rule 1420 will be subject to additional mitigation requirements.

Rule 1420 would affect 107 facilities out of which one is classified as a Recyclable Material Merchant Wholesaler, with the remaining 106 facilities classified under the Manufacturing sector. Among all affected facilities, 43 are in Los Angeles, 57 in Orange, four in Riverside, and three are located in San Bernardino County. Only 15 out of the 107 affected facilities would incur cost impacts related to periodic source testing, capture efficiency testing, and building enclosure, and rooftop cleaning requirements. The remaining 92 facilities would only be subject to the housekeeping and recordkeeping requirements at nominal costs. Based on SCAQMD permit data and available information on employees and sales, 11 of the 107 facilities are small businesses as defined under Rule 102. These 11 facilities are only subject to the housekeeping and recordkeeping requirements.

The annual compliance costs of Rule 1420 were estimated to range from \$273,000 to \$280,000, depending on the real interest rate assumed (one to four percent). The source testing requirement would contribute to about 80 percent of the total annual cost. On a per facility basis, it was estimated that each of the 15 affected facilities referenced above could incur an annual cost of \$4,800 to \$43,000 depending on the number of lead point sources at the facility and the level of construction necessary to enclose the buildings housing their lead processing areas. Since the overall annualized cost of compliance with Rule 1420 was estimated at \$4,800 to \$43,000, a REMI analysis was not conducted, because the estimated overall compliance costs would result in minimal job impacts in the regional economy.

Amended Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants (December 2017)

Rule 1466 was amended to address the Governing Board’s Resolution directing staff to expand the list of applicable toxic air contaminants. The amendments to Rule 1466: 1) expanded the list of applicable toxic air contaminants to include pesticides, herbicides, and persistent bio-cumulative toxics; 2) expanded applicability to other government designated sites; and 3) included language to clarify existing provisions. The sites that may be affected by Rule 1466 have been designated as cleanup sites on lists compiled by the United States Environmental Protection Agency, the California Department of Toxic Substances Control (DTSC), the California Environmental Protection Agency’s State Water Resources Control Board or Regional Water Quality Control Board, and other county, local, or state regulatory agencies.

These amendments would result in an increased number of potentially affected sites and industries than previously estimated for the current rule. Based on data collected for sites with soil containing one or more of the additional applicable toxic air contaminant(s), approximately two additional sites per year would be potentially impacted. The current owners or responsible parties of these additional impacted sites, which may differ from the previous industrial operations that resulted in contamination at these sites, may belong to: Lessors of Residential Buildings and Dwellings (NAICS 531100), Line-Haul Railroads (NAICS 482111), Solid Waste Landfill (NAICS 562212), Administration of Air and Water Resource and Solid Waste Management Programs (NAICS 924110), Administration of Conservation Programs (NAICS 924120), and National Security (NAICS 928110).

The incremental cost related to compliance with the additional monitoring and fugitive dust control requirements was estimated at about \$182,000 per year, which would bring the total estimated cost of compliance to \$913,000. The estimated total compliance costs would result in a minimal impact on jobs in the regional economy.

Rule Amendments without Socioeconomic Impacts

Amended Rule 1147 - NOx Reductions from Miscellaneous Sources (July 2017)

Rule 1147 was amended to resolve compliance issues that have been raised by stakeholders by: 1) removing the requirement to comply with the NOx emission limit for units with a heat input rating of less than 325,000 British Thermal Units per hour; 2) changing the NOx emission limit for low temperature afterburners, burn-off ovens, incinerators, and related equipment from 30 ppm to 60 ppm; 3) changing the compliance date for small in-use units with NOx 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 or retrofit; 4) changing 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; 5) adding a testing exemption for ultra-low NOx infrared burners; 6) providing compliance flexibility for low emission units by clarifying options for demonstrating emissions less than one pound per day; 7) adding an exemption for units with NOx emission less than one pound per day when a company relocates a facility and remains under the same ownership; 8) adding an exemption for units that become subject to Rule 1147 upon amendment of Rule

219 on or after May 5, 2017, until the unit is replaced; 9) adding flexibility for demonstrating compliance with emission limits by including an alternative compliance demonstration option based on a manufacturer's performance guarantee; 10) clarifying an exemption for food ovens; and 11) clarifying an exemption for flare type systems. Other minor changes were also made for clarity and consistency throughout the rule. Rule 1147 was estimated to result in NO_x emission reductions foregone of up to 0.9 ton per day in 2017. However, while most of the estimated NO_x 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_x emission reductions foregone will be permanent. Amended Rule 1147 would delay and/or reduce implementation costs to affected businesses and facilitate compliance, thus resulting in overall cost-savings.

Four CEQA alternatives were analyzed. Alternative A, the no project alternative, means that the version of Rule 1147 that was amended in September 2011 would remain in effect. Alternative B considered a more stringent age requirement for compliance demonstration (25 years). At the same time, Alternative B did not contain a relocation exemption and was as stringent as the September 2011 version of Rule 1147. However, Alternative B considered additionally requiring compliance with emission limits when multiple similar process units at a facility have combined NO_x emissions greater than one pound per day—a requirement more stringent than the existing rule. Alternative C considered exempting all pressure washers from complying with any emission limit without including an age requirement, so it was considered less stringent than both the September 2011 and July 2017 amendments to Rule 1147. Similar to Alternative C, Alternative D considered exempting all pressure washers from complying with any emission limit without including an age requirement plus it considered exempting all units with NO_x emissions less than one pound per day (to be demonstrated through recordkeeping), making it the least stringent CEQA alternative.

The July 2017 amendments to Rule 1147 and CEQA Alternatives C and D were concluded to result in delayed (due to a less stringent compliance schedule) and avoided (due to additional exemptions) incurrence of compliance costs and overall cost-savings. CEQA Alternative A was concluded to not result in any cost impact as the status quo would be maintained. CEQA Alternative B was concluded to 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. Alternative B also considered an additional compliance requirement for facilities with combined NO_x emissions greater than one pound per day from multiple similar process units. Therefore, under Alternative B, some compliance costs were shown to potentially occur sooner and offset some of the avoided compliance costs related to the 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, on the net, Alternative B was concluded to not result in additional compliance costs beyond what was expected to be incurred by the affected facilities for compliance with the September 2011 and July 2017 amendments to Rule 1147.

Existing Rules/Regulation with Ongoing Socioeconomic Impacts

Amended Regulation III – Fees and Rule 320—Automatic Adjustment Based on Consumer Price Index (CPI) for Regulation III Fees (June 2017)

Amendments to Regulation III rules consisted of four components. First, pursuant to Rule 320 – Automatic Adjustment Based on Consumer Price Index for Regulation III - Fees, most fees in Rules 301, 303, 304, 304.1, 306, 307.1, 308, 309, 311, 313, 314, and 315 were updated on July 1, 2017 according to the increase in the Calendar Year 2016 California Consumer Price Index (CPI) of 2.5 percent¹. Second, Rules 301 and 306 were amended to increase the 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, Rules 301, 306, and 309 were amended to increase the 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, various administrative amendments with no fee impacts were made to Rules 301, 306, 308, and 314.

The October 29, 2010 SCAQMD Governing Board Resolution annually requires, by March 15, an assessment of the increase in fee rates based on the previous year's CPI. 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) occurred on July 1, 2017. A socioeconomic assessment was conducted to assess the cost impacts of these fee increases. In addition, the analysis provides background information, such as historical trends of SCAQMD revenues from various fees and sectoral distributions of these fees.

Based on the fee categories examined in this analysis and last year's activity levels, the overall Regulation 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 four 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.

Nearly all the facilities regulated by SCAQMD would be affected by the proposed fee increases and these facilities belong to every sector of the economy. The fees examined included 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 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

¹ 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 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.

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.

Plan Adoption with Socioeconomic Impacts

Adopted 2016 Air Quality Management Plan (March 2017)

The adopted 2016 AQMP identified control measures and strategies to bring the region into attainment with the revoked 1997 8-hour National Ambient Air Quality Standard (standard) (80 ppb) for ozone by 2024; the 2008 8-hour ozone standard (75 ppb) by 2032; the 2012 annual PM_{2.5} standard (12 µg/m³) by 2025; the 2006 24-hour PM_{2.5} standard (35 µg/m³) by 2019; and the revoked 1979 1-hour ozone standard (120 ppb) by 2023. The 2016 AQMP consists of three components: 1) the SCAQMD's Stationary, Area, and Mobile Source Control Measures; 2) State and Federal Control Measures provided by the California Air Resources Board; and 3) Regional Transportation Strategy and Control Measures provided by the Southern California Association of Governments. The 2016 AQMP includes emission inventories and control measures for stationary, area and mobile sources, the most current air quality setting, updated growth projections, new modeling techniques, demonstrations of compliance with state and federal Clean Air Act requirements, and an implementation schedule for adoption of the proposed control strategy.

In 2017, staff prepared the Final Socioeconomic Assessment of the 2016 AQMP which included three final documents: 1) main report containing final estimates of benefits, costs, and regional economic impacts, 2) appendices, and 3) responses to comments. The 2016 AQMP control strategy will seek emission reductions from stationary and mobile sources through command-and-control regulations and incentives to help accelerate the deployment of cleaner equipment for the purpose of achieving federal and state air quality standards.

Incremental Costs and Public Health Benefits

The incremental costs and public health benefits of the 2016 AQMP are expected to alter, to various degrees, the economic decisions made by households, businesses, and other economic actors. Some businesses would see production costs go up while other businesses would benefit from a greater demand for their services and technologies. For consumers who consider purchasing or replacing vehicles or certain household appliances, the proposed control strategies would also change or widen the range of product choices that differ in fuel types, energy efficiencies, effective unit prices, and thus potential payback periods. Improved public health would contribute to higher labor productivity and reduce healthcare-related expenditures, while also increasing the region's attractiveness to economic migrants.

All of these direct effects would then cascade through the regional economy and would produce indirect and induced macroeconomic impacts.

The total incremental cost of the 2016 AQMP was estimated to be \$15.7 billion in present worth value (expressed in 2015 dollars) over the life of all equipment and fleets that are expected to be put into operation. Between 2017 and 2031, the amortized annual average incremental cost would be \$848 million, which is less than one tenth of a percent (0.07 percent) of the \$1.3 trillion worth of annual gross domestic output in the region.

About 60 percent or \$9.3 billion of the total incremental cost is related to CARB mobile source control strategies affecting the Basin. About 36 percent or \$5.7 billion is associated with SCAQMD control measures for stationary sources, and the remaining four percent or \$0.6 billion represents SCAQMD's local mobile source measures. The proposed incentives, in the amount of \$14.6 billion, would be distributed to eligible industries and consumers and offset more than 90 percent of the total incremental cost estimated for the 2016 AQMP.

The region will also experience benefits from the implementation of the 2016 AQMP. Air pollution continues to be linked to increases in death rates (mortality) and increases in illness and other health effects (morbidity). It was estimated that, as a result of implementing the 2016 AQMP, an average of 1,600 premature deaths would be avoided per year. Numerous other non-fatal health conditions were also estimated to be avoided annually, including about 2,500 asthma-related emergency department visits, about 700 hospital admissions related to asthma, cardiovascular, or respiratory conditions, and more than 200,000 person-days of work and school absences. Due to these lowered mortality and morbidity risks, an estimated \$173 billion worth of public health benefits are expected to accrue in the four-county region, cumulatively from 2017 to 2031. This represents an average of \$16.5 billion in public health benefits per year. Over 95 percent of the estimated public health benefits are associated with avoided premature deaths from reduced long-term exposure to PM_{2.5}. Although not quantified in this report, there exist additional public welfare benefits related to clean air from preventing damage to agriculture, ecology, visibility, buildings, and materials.

Regional Economic and Job Impacts

As a result of incremental costs and health benefits associated with the 2016 AQMP, the overall job impact on the four-county region of Los Angeles, Orange, Riverside, and San Bernardino is projected to range from 9,000 jobs foregone to 29,000 jobs gained per year from 2017 to 2031, relative to the baseline job forecast where the 2016 AQMP control strategies are not implemented. In an economy with nearly 18 million people and more than 10 million jobs, the projected changes in the total number of regional jobs are expected to have a minimal impact on the region's long-term job growth. The region's projected annualized job growth rate between 2016 and 2031 will remain at slightly above one percent (1.01 to 1.04 percent) under all 2016 AQMP scenarios examined with macroeconomic impact modeling.

Under the main scenario (i.e., incentives funded by existing state revenue sources and full air-related public health benefits for regional amenity adjustments), the region is expected to gain an average of about 14,000 jobs per year from 2017 to 2031. The annualized job growth

rate would increase slightly to 1.04 percent from the baseline rate of 1.02 percent between 2016 and 2031. In the beginning years, however, large amounts of incentives would directly result in funds diverted from local spending and thus jobs foregone in many sectors of the regional economy, among which state and local governments would be most adversely impacted, followed by construction, retail trade, and healthcare and social assistance sectors. Over time, as the control strategies are implemented and public health benefits are realized, increased regional amenity is expected to attract more economic migrants and enlarge the pie of the regional economy, thereby creating more jobs.

To provide stakeholders with more information about how the 2016 AQMP would potentially impact different sub-county communities within the region, sub-regional distributions for incremental costs, public health benefits, and net job impacts were also provided. The average annualized incremental costs between 2017 and 2031, if spread among the region's population, would range from approximately \$21 million in Orange North, a sub-region of Orange County to \$61 million in the San Fernando sub-region of Los Angeles County. The average annual public health benefits range from \$122 million in Other San Bernardino, the northern sub-region of San Bernardino County, to \$2.1 billion in the Central sub-region of Los Angeles County. Of the 14,000 jobs expected to be gained on average each year during the period of 2017-2031, the Central Los Angeles sub-region of Los Angeles County is expected to see the largest gain of jobs, with nearly 2,000 jobs being added on average each year to the baseline forecast levels, while the Riverside sub-region of Riverside Other will see about 40 jobs foregone on average each year during the same period.

Environmental Justice Impacts

The SCAQMD defines Environmental Justice (EJ) as "equitable environmental policymaking and enforcement to protect the health of all residents, regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location, from the health effects of air pollution." It is akin to the U.S. EPA's definition: "Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies."² California state law similarly defines EJ as "the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies."³

For the 2016 AQMP, the EJ analysis was significantly enhanced and expanded compared to previous AQMPs by investigating the distributional impact of the 2016 AQMP based on multiple alternative definitions of EJ communities. Specifically, staff examined whether estimated reductions in health risks associated with air pollution would reduce or exacerbate baseline inequality in the Basin. Inequality between EJ and non-EJ communities was also analyzed to identify any potential differences. First, as a result of implementing the 2016 AQMP, greater per-capita monetized public health benefits are anticipated to accrue in EJ communities than non-EJ communities. Next, in terms of the distribution of health risk related to air pollution exposure, inequality in mortality-related risk more likely to affect the

² See <http://www3.epa.gov/environmentaljustice/>.

³ California Senate Bill 115, Solis, 1999; California Government Code Section 65040.12(c).

elderly population was found to decrease overall, which is also true between the EJ and non-EJ communities. This finding is consistent for both mortality-related risk associated with long-term exposure to PM2.5 and short-term exposure to ozone. However, the inequality of morbidity risk for asthma-related emergency room visits among children that is associated with short-term exposure to ozone are expected to increase slightly between EJ and non-EJ communities, despite a decrease in overall inequality. These general results do not change based on the different EJ definitions analyzed.

CEQA Alternatives

The 2016 AQMP also examined the potential socioeconomic impacts of CEQA alternatives to the proposed 2016 AQMP. The Final Program Environmental Impact Report included four alternatives: Alternative 1 - No Project; Alternative 2 - Mobile Source Emission Reductions Only; Alternative 3 - CARB and SCAQMD Regulations Only; and Alternative 4 - Expanded Incentive Funding. All the alternatives above, except the No Project Alternative, are required to be realistic and provide a viable path to attainment of NAAQS, thus achieving similar or greater public health benefits. Therefore, for Alternatives 2, 3, and 4, only incremental costs and the associated job impacts were analyzed and compared to the corresponding impacts of the proposed 2016 AQMP. For purposes of the socioeconomic assessment, Alternatives 2 and 3 were analyzed based on the assumption that they would lead to NAAQS attainment with CAA Section 182(e)(5) measures (i.e., “black box” measures). Alternative 4 assumes additional or accelerated emission reductions achievable by expanded incentive funding. Incremental costs of both Alternatives 2 and 3 are projected to result in fewer jobs foregone than the proposed 2016 AQMP; whereas, incremental costs for Alternative 4 are projected to result in more jobs foregone, mainly due to higher incentive amounts assumed to be provided by existing sources of state funds for local spending. Alternative 4 would result in more emission reductions, however, which would also likely increase public health benefits above the 2016 AQMP. Caution should be exercised, however, as the projected cost estimates and job impacts are highly dependent on the assumptions made for each alternative.

Future Enhancements

Staff will continue working to update the technical aspects of its analyses which includes updating methodologies to quantify visibility, material, and agricultural benefits, developing methods to properly normalize the magnitude of adjustment to the amenity coefficient in REMI, evaluating the use of other modeling tools such as partial equilibrium modeling to supplement REMI for small scale impacts, updating best practices for estimating small business impacts, and closely monitoring the U.S. EPA Science Advisory Board’s Economy-Wide Modeling Panel discussions and recommendations, particularly on the macroeconomic modeling of non-market benefits. Retrospective studies, when feasible, will be considered as part of the implementation plan to enhance the uncertainty analysis.

CHAPTER II
ENGINEERING AND PERMITTING ACTIVITIES

ENGINEERING AND PERMITTING

As shown in Table 1, during calendar year 2017, SCAQMD dispositioned a total of 10,504 applications. The majority of these applications were for Permits to Operate (3,774), Area Sources & Certified/ Registrations (2,927), and Changes of Operators (1,236). Also, 910 permits were not renewed. The total number of dispositioned applications for 2017 is about 6% higher than the total for 2016, mainly attributed to the SCAQMD’s continuing Permit Application Backlog Reduction efforts.

TABLE - 1	
Permit Applications Completed During Calendar Year 2017	
Type	Count
Permits to Construct	451
Permits to Operate	3774*
Changes of Operator	1236
Denials	42
Cancellations	864
ERCs	71
Plans	857
TV/RECLAIM	282
Area Sources & Certified/Registrations	2927
Total	10,504
<i>Permits Not Renewed</i>	910

*This includes 2,414 applications for Permit to Construct that were issued as Permits to Construct/Operate

Table 2 - Permits Dispositioned by NAICS Code

Table 2 contains a breakdown of permits dispositioned (in the nine categories) and permits not renewed, by type of industry. The type of industry was based on North American Industry Classification System (NAICS) codes, which were provided by the applicant at the time of application filing. The top four NAICS codes were 324110 – Petroleum Refineries, 445110 – Supermarkets and Other Grocery (except for Convenience) Stores, 447190 – Other Gasoline Stations, and 811121 – Automotive Body, Paint, and Interior Repair and Maintenance.

	Total Applications:	451	3774	1236	42	864	71	857	282	2927	910
NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
111219	Other Vegetable (except Potato) and Melon Farming									1	
111320	Citrus (except Orange) Groves		2								
111332	Grape Vineyards									10	
111421	Nursery and Tree Production										2
111920	Cotton Farming									3	
111998	All Other Miscellaneous Crop Farming		6	5				1		1	
112120	Dairy Cattle and Milk Production		1	1				1		2	
112511	Finfish Farming and Fish Hatcheries									1	
112990	All Other Animal Production		1							2	
115112	Soil Preparation, Planting, and Cultivating		1								
115114	Postharvest Crop Activities (except Cotton Ginning)									1	
115115	Farm Labor Contractors and Crew Leaders									3	
115210	Support Activities for Animal Production	1	4								
115310	Support Activities for Forestry		1								
211110	Oil and Gas Extraction									5	
211111	Crude Petroleum and Natural Gas Extraction	6	26	66		20	1	2	6	16	4
211112	Natural Gas Liquid Extraction		2	2		1			1	9	

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NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
212311	Dimension Stone Mining and Quarrying										2
212312	Crushed and Broken Limestone Mining and Quarrying		2								
212319	Other Crushed and Broken Stone Mining and Quarrying	2	1			1			1		
212321	Construction Sand and Gravel Mining		8			4					1
212322	Industrial Sand Mining		6			1			3		
212391	Potash, Soda, and Borate Mineral Mining		1								
212399	All Other Nonmetallic Mineral Mining		4							5	
213111	Drilling Oil and Gas Wells		1							5	
213112	Support Activities for Oil and Gas Operations		4	19						9	4
221111	Hydroelectric Power Generation							3		1	
221112	Fossil Fuel Electric Power Generation	5	61			21	1	7	18	37	2
221118	Other Electric Power Generation	35	4	18		19		4	7	13	1
221121	Electric Bulk Power Transmission and Control									1	
221122	Electric Power Distribution		3							1	
221210	Natural Gas Distribution		6					5	2	3	
221310	Water Supply and Irrigation Systems	1	55	1		3		4		25	3

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NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
221320	Sewage Treatment Facilities	1	54			11		26		6	
221330	Steam and Air-Conditioning Supply									1	
236115	New Single-Family Housing Construction (except For-Sale Builders)		25	2	1	4		1		74	4
236116	New Multifamily Housing Construction (except For-Sale Builders)		2					4			1
236117	New Housing For-Sale Builders										3
236118	Residential Remodelers		1							12	
236210	Industrial Building Construction		9								
236220	Commercial and Institutional Building Construction		6	11				7		27	1
237110	Water and Sewer Line and Related Structures Construction		1	25	1	2	1	2		1	
237120	Oil and Gas Pipeline and Related Structures Construction	1	1		1	2				1	1
237210	Land Subdivision		3	1				13		10	4
237310	Highway, Street, and Bridge Construction		15			1		3		1	3
237990	Other Heavy and Civil Engineering Construction							1		1	6
238110	Poured Concrete Foundation and Structure Contractors		16	4	3			3		6	
238130	Framing Contractors		1	1							3

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NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
238140	Masonry Contractors		3								
238160	Roofing Contractors		1							16	4
238190	Other Foundation, Structure, and Building Exterior Contractors			1							
238210	Electrical Contractors and Other Wiring Installation Contractors		9							2	4
238220	Plumbing, Heating, and Air-Conditioning Contractors		3	1		1				8	
238290	Other Building Equipment Contractors					1					
238310	Drywall and Insulation Contractors					1				2	
238320	Painting and Wall Covering Contractors	1	6	1						12	8
238330	Flooring Contractors		1								
238340	Tile and Terrazzo Contractors		9			3					
238350	Finish Carpentry Contractors		2								
238910	Site Preparation Contractors		3					4		123	2
238990	All Other Specialty Trade Contractors		15	1				1		81	5
311111	Dog and Cat Food Manufacturing		4			9					
311119	Other Animal Food Manufacturing		1								
311211	Flour Milling		8								
311340	Nonchocolate Confectionery Manufacturing										1

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NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
311411	Frozen Fruit, Juice, and Vegetable Manufacturing		1							1	
311412	Frozen Specialty Food Manufacturing	2	2								
311511	Fluid Milk Manufacturing		11			4	1			2	
311513	Cheese Manufacturing							1			
311514	Dry, Condensed, and Evaporated Dairy Product Manufacturing			1				2			
311520	Ice Cream and Frozen Dessert Manufacturing									1	
311611	Animal (except Poultry) Slaughtering			11						2	
311612	Meat Processed from Carcasses		4			7		2			
311613	Rendering and Meat Byproduct Processing	4	5			1			4		
311710	Seafood Product Preparation and Packaging		1								
311811	Retail Bakeries			1						1	3
311812	Commercial Bakeries	3	7	1		20		3	1	29	
311821	Cookie and Cracker Manufacturing		4			2				2	
311824	Dry Pasta, Dough, and Flour Mixes Manufacturing from Purchased Flour		4			3		2	1		
311830	Tortilla Manufacturing		1			14					

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311911	Roasted Nuts and Peanut Butter Manufacturing	3	4			3		1			
311919	Other Snack Food Manufacturing		12			7		2	1	1	
311920	Coffee and Tea Manufacturing		7			3					
311930	Flavoring Syrup and Concentrate Manufacturing		11					1			
311941	Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing		1					1			
311942	Spice and Extract Manufacturing		3								
311991	Perishable Prepared Food Manufacturing		1								
311999	All Other Miscellaneous Food Manufacturing		15			4		1			
312111	Soft Drink Manufacturing		8	9		1					
312112	Bottled Water Manufacturing		3			2					
312120	Breweries	2	11			3			2		
312130	Wineries									1	
313210	Broadwoven Fabric Mills		3	6					1		
313310	Textile and Fabric Finishing Mills	5	7	2		6			3		
313320	Fabric Coating Mills	2	2						1		2
314110	Carpet and Rug Mills		2			4			1		
314120	Curtain and Linen Mills									3	
314999	All Other Miscellaneous Textile Product Mills		1	1							

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315240	Women's, Girls', and Infants' Cut and Sew Apparel Manufacturing										1
316210	Footwear Manufacturing		1								
316998	All Other Leather Good and Allied Product Manufacturing		7			1					
321114	Wood Preservation		4	4							
321211	Hardwood Veneer and Plywood Manufacturing										6
321911	Wood Window and Door Manufacturing										1
321918	Other Millwork (including Flooring)		2								
321920	Wood Container and Pallet Manufacturing		1								
321999	All Other Miscellaneous Wood Product Manufacturing			1							2
322110	Pulp Mills		4								
322121	Paper (except Newsprint) Mills		1							6	
322211	Corrugated and Solid Fiber Box Manufacturing	1	14	12		2			1		
322212	Folding Paperboard Box Manufacturing		1							1	
322219	Other Paperboard Container Manufacturing		3								
322220	Paper Bag and Coated and Treated Paper Manufacturing	3	4			1			1	1	6

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323111	Commercial Printing (except Screen and Books)	4	22	11		9		1	6	3	8
323113	Commercial Screen Printing			1						1	
324110	Petroleum Refineries	32	157	7		97	2	64	41	50	2
324121	Asphalt Paving Mixture and Block Manufacturing	9	21	4	1	7			11		4
324122	Asphalt Shingle and Coating Materials Manufacturing	5	28			9	3		4	1	
324191	Petroleum Lubricating Oil and Grease Manufacturing		15			1		2	4	3	
324199	All Other Petroleum and Coal Products Manufacturing									1	
325110	Petrochemical Manufacturing	3	11	3							
325120	Industrial Gas Manufacturing		3			2			1	1	
325130	Synthetic Dye and Pigment Manufacturing	3	3			3					17
325180	Other Basic Inorganic Chemical Manufacturing		28			19				2	
325193	Ethyl Alcohol Manufacturing		1								
325211	Plastics Material and Resin Manufacturing	4	42			4	1	4	1	2	
325212	Synthetic Rubber Manufacturing	1	6	2		4		3			
325311	Nitrogenous Fertilizer Manufacturing					1					
325314	Fertilizer (Mixing Only)		5								

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	Manufacturing										
325320	Pesticide and Other Agricultural Chemical Manufacturing		4							2	
325411	Medicinal and Botanical Manufacturing		3							3	
325412	Pharmaceutical Preparation Manufacturing		40	20		28		6	3	9	2
325414	Biological Product (except Diagnostic) Manufacturing		3			1			1	2	
325510	Paint and Coating Manufacturing	1	11	11		12		2	1	1	
325520	Adhesive Manufacturing		1	7				2		1	
325611	Soap and Other Detergent Manufacturing		2								
325612	Polish and Other Sanitation Good Manufacturing		7			1				1	3
325620	Toilet Preparation Manufacturing		32			14				4	
325910	Printing Ink Manufacturing		2			1			1		
325991	Custom Compounding of Purchased Resins					1					
325998	All Other Miscellaneous Chemical Product and Preparation Manufacturing		13	54		3		1		2	
326111	Plastics Bag and Pouch Manufacturing	1	2								
326112	Plastics Packaging Film and Sheet (including Laminated) Manufacturing		6			2					

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326121	Unlaminated Plastics Profile Shape Manufacturing		1								9
326122	Plastics Pipe and Pipe Fitting Manufacturing		5								
326130	Laminated Plastics Plate, Sheet (except Packaging), and Shape Manufacturing			16	1			1			
326140	Polystyrene Foam Product Manufacturing		9						4	1	
326150	Urethane and Other Foam Product (except Polystyrene) Manufacturing		18								
326160	Plastics Bottle Manufacturing		5							1	
326191	Plastics Plumbing Fixture Manufacturing		3			2		1	1		
326199	All Other Plastics Product Manufacturing	20	102	1		16		3	5		2
326211	Tire Manufacturing (except Retreading)		1	1							
326291	Rubber Product Manufacturing for Mechanical Use		3								
326299	All Other Rubber Product Manufacturing		12	8							
327110	Pottery, Ceramics, and Plumbing Fixture Manufacturing		3			1					2
327120	Clay Building Material and Refractories Manufacturing		1						3		
327211	Flat Glass Manufacturing		2	5					2		

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327212	Other Pressed and Blown Glass and Glassware Manufacturing							1		1	
327213	Glass Container Manufacturing	4								1	
327215	Glass Product Manufacturing Made of Purchased Glass		2						1		
327310	Cement Manufacturing		9			7					
327320	Ready-Mix Concrete Manufacturing		10	10							1
327331	Concrete Block and Brick Manufacturing		1			2					
327332	Concrete Pipe Manufacturing		3							1	
327390	Other Concrete Product Manufacturing		12			1		1			3
327410	Lime Manufacturing					1					
327420	Gypsum Product Manufacturing		5	1							
327991	Cut Stone and Stone Product Manufacturing			2							
327992	Ground or Treated Mineral and Earth Manufacturing		11						1		
327999	All Other Miscellaneous Nonmetallic Mineral Product Manufacturing		7							1	
331110	Iron and Steel Mills and Ferroalloy Manufacturing		4							1	
331210	Iron and Steel Pipe and Tube Manufacturing from Purchased Steel	9	10			1		5	1	6	

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331221	Rolled Steel Shape Manufacturing	3	2			18	9			2	1
331222	Steel Wire Drawing		6								
331313	Alumina Refining and Primary Aluminum Production	2	1						2		
331315	Aluminum Sheet, Plate, and Foil Manufacturing					1			1		
331318	Other Aluminum Rolling, Drawing, and Extruding		16			2			2		
331410	Nonferrous Metal (except Aluminum) Smelting and Refining		5			1					
331491	Nonferrous Metal (except Copper and Aluminum) Rolling, Drawing, and Extruding		10			2		1			
331492	Secondary Smelting, Refining, and Alloying of Nonferrous Metal (except Copper and Aluminum)		17			2		1	2		
331512	Steel Investment Foundries					1				1	
331513	Steel Foundries (except Investment)		8	12							
331523	Nonferrous Metal Die-Casting Foundries		8								
331524	Aluminum Foundries (except Die-Casting)		7			1			2		
332111	Iron and Steel Forging		1	2					1		
332112	Nonferrous Forging	28	8			22			4	8	

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332119	Metal Crown, Closure, and Other Metal Stamping (except Automotive)		5								2
332215	Metal Kitchen Cookware, Utensil, Cutlery, and Flatware (except Precious) Manufacturing										1
332216	Saw Blade and Handtool Manufacturing		4								
332311	Prefabricated Metal Building and Component Manufacturing		2								
332312	Fabricated Structural Metal Manufacturing		3	3							
332313	Plate Work Manufacturing		2								4
332321	Metal Window and Door Manufacturing	1				1					
332322	Sheet Metal Work Manufacturing	3	7	6							3
332323	Ornamental and Architectural Metal Work Manufacturing					1					
332431	Metal Can Manufacturing		14						4		
332439	Other Metal Container Manufacturing		2			2		1	1		
332510	Hardware Manufacturing		2					1		1	1
332613	Spring Manufacturing					1					
332710	Machine Shops	1	1	10		2					2
332721	Precision Turned Product Manufacturing		1								

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332722	Bolt, Nut, Screw, Rivet, and Washer Manufacturing	10	29	2		4		2	2	18	
332811	Metal Heat Treating	5		4					2		
332812	Metal Coating, Engraving (except Jewelry and Silverware), and Allied Services to Manufacturers	6	25	21		5		3	3		16
332813	Electroplating, Plating, Polishing, Anodizing, and Coloring	12	74		1	17		8	1	1	23
332912	Fluid Power Valve and Hose Fitting Manufacturing									1	
332913	Plumbing Fixture Fitting and Trim Manufacturing	10	1								
332919	Other Metal Valve and Pipe Fitting Manufacturing		1							4	
332991	Ball and Roller Bearing Manufacturing		1								
332996	Fabricated Pipe and Pipe Fitting Manufacturing		3						1	3	
332999	All Other Miscellaneous Fabricated Metal Product Manufacturing	2	7								
333111	Farm Machinery and Equipment Manufacturing		1								
333131	Mining Machinery and Equipment Manufacturing		1								

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333241	Food Product Machinery Manufacturing		2			4					
333249	Other Industrial Machinery Manufacturing		1								8
333314	Optical Instrument and Lens Manufacturing		4								
333316	Photographic and Photocopying Equipment Manufacturing									2	
333318	Other Commercial and Service Industry Machinery Manufacturing		6	5		1					
333413	Industrial and Commercial Fan and Blower and Air Purification Equipment Manufacturing										2
333415	Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipme	3				1				24	
333514	Special Die and Tool, Die Set, Jig, and Fixture Manufacturing	1				3					
333519	Rolling Mill and Other Metalworking Machinery Manufacturing		2								
333613	Mechanical Power Transmission Equipment Manufacturing		1								
333912	Air and Gas Compressor Manufacturing		11								

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333921	Elevator and Moving Stairway Manufacturing		1								
333923	Overhead Traveling Crane, Hoist, and Monorail System Manufacturing		2								
333924	Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing							1	1		
333992	Welding and Soldering Equipment Manufacturing										1
333993	Packaging Machinery Manufacturing		2								
333999	All Other Miscellaneous General Purpose Machinery Manufacturing	1	2							3	
334112	Computer Storage Device Manufacturing		1			1					
334118	Computer Terminal and Other Computer Peripheral Equipment Manufacturing		5							5	
334220	Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing	3	3						4	3	
334290	Other Communications Equipment Manufacturing		7			1					1
334310	Audio and Video Equipment Manufacturing		2								
334412	Bare Printed Circuit Board								1		

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	Manufacturing										
334413	Semiconductor and Related Device Manufacturing	2	17			8		3	5	13	1
334416	Capacitor, Resistor, Coil, Transformer, and Other Inductor Manufacturing							1	1		
334417	Electronic Connector Manufacturing									2	
334418	Printed Circuit Assembly (Electronic Assembly) Manufacturing		27	1			3	1	1	1	4
334419	Other Electronic Component Manufacturing		4					1		1	6
334510	Electromedical and Electrotherapeutic Apparatus Manufacturing		3					2		7	
334511	Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufactu									1	
334513	Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industria		2								
334515	Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals		1							1	1
334519	Other Measuring and Controlling Device Manufacturing		5			3					1

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335110	Electric Lamp Bulb and Part Manufacturing		1	1							
335121	Residential Electric Lighting Fixture Manufacturing		3								
335122	Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing	1	2								
335129	Other Lighting Equipment Manufacturing		1								
335221	Household Cooking Appliance Manufacturing		3								
335311	Power, Distribution, and Specialty Transformer Manufacturing					1				1	
335312	Motor and Generator Manufacturing		1								
335314	Relay and Industrial Control Manufacturing									2	
335911	Storage Battery Manufacturing	6	29			7		7		2	
335931	Current-Carrying Wiring Device Manufacturing		3								
335991	Carbon and Graphite Product Manufacturing		14			5		3	3		
336111	Automobile Manufacturing	1									
336211	Motor Vehicle Body Manufacturing								1		1
336213	Motor Home Manufacturing	5									
336214	Travel Trailer and Camper			15				2	2		1

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	Manufacturing										
336320	Motor Vehicle Electrical and Electronic Equipment Manufacturing		1								
336390	Other Motor Vehicle Parts Manufacturing	6	6					1	4	9	
336411	Aircraft Manufacturing	15	22			3		7	6	27	
336412	Aircraft Engine and Engine Parts Manufacturing	19	14			5			7	8	
336413	Other Aircraft Parts and Auxiliary Equipment Manufacturing	9	13	13		3		7	2	11	1
336414	Guided Missile and Space Vehicle Manufacturing		3			3				2	
336419	Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing		3			1			2	9	
336611	Ship Building and Repairing		1								
336612	Boat Building										5
337110	Wood Kitchen Cabinet and Countertop Manufacturing		3			1					1
337122	Nonupholstered Wood Household Furniture Manufacturing		1			1			1	1	1
337127	Institutional Furniture Manufacturing		6			1		1		1	
337211	Wood Office Furniture Manufacturing		1						2		4

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337214	Office Furniture (except Wood) Manufacturing		1								
337215	Showcase, Partition, Shelving, and Locker Manufacturing		1								
337910	Mattress Manufacturing									1	4
339112	Surgical and Medical Instrument Manufacturing		5	2		7		3		7	
339113	Surgical Appliance and Supplies Manufacturing			1						1	
339114	Dental Equipment and Supplies Manufacturing		4								
339115	Ophthalmic Goods Manufacturing		2			3				1	
339910	Jewelry and Silverware Manufacturing			2						1	
339930	Doll, Toy, and Game Manufacturing									3	
339940	Office Supplies (except Paper) Manufacturing										1
339950	Sign Manufacturing	1	1					2			
339991	Gasket, Packing, and Sealing Device Manufacturing								1		
339992	Musical Instrument Manufacturing	1	1								
339999	All Other Miscellaneous Manufacturing		16	1		2					19

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423110	Automobile and Other Motor Vehicle Merchant Wholesalers	1	4			1				1	
423120	Motor Vehicle Supplies and New Parts Merchant Wholesalers		2	4						1	3
423130	Tire and Tube Merchant Wholesalers			1							
423140	Motor Vehicle Parts (Used) Merchant Wholesalers		3					2			
423210	Furniture Merchant Wholesalers		2	1		1				1	1
423220	Home Furnishing Merchant Wholesalers		2					1			
423310	Lumber, Plywood, Millwork, and Wood Panel Merchant Wholesalers			1						1	1
423320	Brick, Stone, and Related Construction Material Merchant Wholesalers		6	5						1	
423410	Photographic Equipment and Supplies Merchant Wholesalers							8		1	
423420	Office Equipment Merchant Wholesalers									1	
423430	Computer and Computer Peripheral Equipment and Software Merchant Wholesalers	5	6					1		1	
423440	Other Commercial Equipment Merchant Wholesalers									1	

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423450	Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers		2					3		2	1
423490	Other Professional Equipment and Supplies Merchant Wholesalers					1					
423510	Metal Service Centers and Other Metal Merchant Wholesalers		7			2		1			
423520	Coal and Other Mineral and Ore Merchant Wholesalers									1	
423610	Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholesalers		3								1
423690	Other Electronic Parts and Equipment Merchant Wholesalers		3	6						2	
423710	Hardware Merchant Wholesalers		1	1							
423730	Warm Air Heating and Air-Conditioning Equipment and Supplies Merchant Wholesalers									2	
423740	Refrigeration Equipment and Supplies Merchant Wholesalers					1					
423810	Construction and Mining (except Oil Well) Machinery and Equipment Merchant Wholesalers		3	2						6	

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423820	Farm and Garden Machinery and Equipment Merchant Wholesalers		1								2
423830	Industrial Machinery and Equipment Merchant Wholesalers	2	6			3					2
423840	Industrial Supplies Merchant Wholesalers		2			1		1		4	
423850	Service Establishment Equipment and Supplies Merchant Wholesalers		2	1						1	
423860	Transportation Equipment and Supplies (except Motor Vehicle) Merchant Wholesalers									1	
423910	Sporting and Recreational Goods and Supplies Merchant Wholesalers		6								1
423920	Toy and Hobby Goods and Supplies Merchant Wholesalers			2							
423930	Recyclable Material Merchant Wholesalers	1	9			2		1	2		
423990	Other Miscellaneous Durable Goods Merchant Wholesalers		1			2				2	4
424110	Printing and Writing Paper Merchant Wholesalers	2	1			1				1	
424120	Stationery and Office Supplies Merchant Wholesalers									1	1

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424130	Industrial and Personal Service Paper Merchant Wholesalers		1								
424210	Drugs and Druggists' Sundries Merchant Wholesalers		9					1		2	1
424310	Piece Goods, Notions, and Other Dry Goods Merchant Wholesalers									1	
424320	Men's and Boys' Clothing and Furnishings Merchant Wholesalers										1
424330	Women's, Children's, and Infants' Clothing and Accessories Merchant Wholesalers		1	1							
424410	General Line Grocery Merchant Wholesalers			1						7	
424430	Dairy Product (except Dried or Canned) Merchant Wholesalers		1			2					
424440	Poultry and Poultry Product Merchant Wholesalers									10	
424450	Confectionery Merchant Wholesalers		2							1	
424470	Meat and Meat Product Merchant Wholesalers		4					1		1	1
424480	Fresh Fruit and Vegetable Merchant Wholesalers		2								1
424490	Other Grocery and Related Products Merchant Wholesalers		5			3		6		1	

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424590	Other Farm Product Raw Material Merchant Wholesalers	3									
424610	Plastics Materials and Basic Forms and Shapes Merchant Wholesalers									1	
424690	Other Chemical and Allied Products Merchant Wholesalers		14	1		6					10
424710	Petroleum Bulk Stations and Terminals		43	1		7	2	4	1		
424720	Petroleum and Petroleum Products Merchant Wholesalers (except Bulk Stations and Terminals)		24	10		3		1		8	
424820	Wine and Distilled Alcoholic Beverage Merchant Wholesalers		3								
424910	Farm Supplies Merchant Wholesalers		2							1	
424950	Paint, Varnish, and Supplies Merchant Wholesalers		2	2							1
424990	Other Miscellaneous Nondurable Goods Merchant Wholesalers		1					1		3	4
441110	New Car Dealers		16	9		3		1		2	
441120	Used Car Dealers		1	1		1					
441210	Recreational Vehicle Dealers		1								
441228	Motorcycle, ATV, and All Other Motor Vehicle Dealers		2	2						1	1

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441310	Automotive Parts and Accessories Stores		10	2		4				1	1
441320	Tire Dealers		5	1				1		2	2
442110	Furniture Stores		3	1				1		1	4
442210	Floor Covering Stores			1							1
442299	All Other Home Furnishings Stores	1	1							1	1
443141	Household Appliance Stores									1	
443142	Electronics Stores		3							2	
444110	Home Centers		8	17				1	1	1	3
444120	Paint and Wallpaper Stores		1	6							
444130	Hardware Stores		4					1		1	
444190	Other Building Material Dealers		9	2		6					1
444220	Nursery, Garden Center, and Farm Supply Stores	2	11								
445110	Supermarkets and Other Grocery (except Convenience) Stores	3	39	7		6	1			343	13
445120	Convenience Stores	4	55	16	1	3				3	
445291	Baked Goods Stores	1						1		1	
445292	Confectionery and Nut Stores									1	
445299	All Other Specialty Food Stores		6			2		1		2	1
446110	Pharmacies and Drug Stores		5							41	
446120	Cosmetics, Beauty Supplies, and Perfume Stores									1	

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446191	Food (Health) Supplement Stores			2							
447100	Gasoline Stations		1								
447110	Gasoline Stations with Convenience Stores	10	30	31		1	2			1	1
447190	Other Gasoline Stations	7	203	44		3	1	8		1	10
448120	Women's Clothing Stores										1
448140	Family Clothing Stores		1							15	
448150	Clothing Accessories Stores									2	
448190	Other Clothing Stores		1	4							3
448210	Shoe Stores		1								1
448310	Jewelry Stores									1	
448320	Luggage and Leather Goods Stores		12								
451110	Sporting Goods Stores		1					3		1	
451120	Hobby, Toy, and Game Stores									2	1
451130	Sewing, Needlework, and Piece Goods Stores										3
451140	Musical Instrument and Supplies Stores		1							1	
451211	Book Stores		1							2	
452111	Department Stores (except Discount Department Stores)			1						27	
452112	Discount Department Stores									31	
452910	Warehouse Clubs and Supercenters		17			3	20			10	

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452990	All Other General Merchandise Stores		2							19	
453110	Florists		2					1		2	
453220	Gift, Novelty, and Souvenir Stores		1								
453310	Used Merchandise Stores		2								
453998	All Other Miscellaneous Store Retailers (except Tobacco Stores)		10	2	3	1		6		9	
454110	Electronic Shopping and Mail-Order Houses			2							
454113	Mail-Order Houses			1				1			
454310	Fuel Dealers	1	10	1							
454390	Other Direct Selling Establishments		2		1					1	
481111	Scheduled Passenger Air Transportation	3							1		
481112	Scheduled Freight Air Transportation		2			3				1	
481211	Nonscheduled Chartered Passenger Air Transportation		1								
482111	Line-Haul Railroads		1					1			1
483212	Inland Water Passenger Transportation		1								
484110	General Freight Trucking, Local		4	5		3				1	1
484121	General Freight Trucking, Long-Distance, Truckload		2					1		2	

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484220	Specialized Freight (except Used Goods) Trucking, Local							1			
485111	Mixed Mode Transit Systems		2							4	
485113	Bus and Other Motor Vehicle Transit Systems		2							2	
485310	Taxi Service				1					1	
485410	School and Employee Bus Transportation		1								
486110	Pipeline Transportation of Crude Oil		7						1		
486210	Pipeline Transportation of Natural Gas		2						2	8	
487990	Scenic and Sightseeing Transportation, Other									2	
488111	Air Traffic Control	4	4				1		5	1	
488119	Other Airport Operations	3	4	19		5				2	1
488190	Other Support Activities for Air Transportation		3							1	
488210	Support Activities for Rail Transportation					1					
488310	Port and Harbor Operations		3						3	2	
488320	Marine Cargo Handling		2	2							
488490	Other Support Activities for Road Transportation		1							1	
488510	Freight Transportation Arrangement		2	4				1		4	

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488999	All Other Support Activities for Transportation		5			1		7	2	2	
491110	Postal Service									2	
492110	Couriers and Express Delivery Services		2								
493110	General Warehousing and Storage		10	5		3		3		5	10
493120	Refrigerated Warehousing and Storage		1			2					
493130	Farm Product Warehousing and Storage		5								
511110	Newspaper Publishers		2						1		1
511130	Book Publishers		15								
511199	All Other Publishers									2	
511210	Software Publishers		1	2							2
512110	Motion Picture and Video Production	1	9	2	2	3		15		16	2
512120	Motion Picture and Video Distribution		1							1	
512191	Teleproduction and Other Postproduction Services		7	2		1					
512199	Other Motion Picture and Video Industries									2	1
515111	Radio Networks			1							
515120	Television Broadcasting		1							2	1
515210	Cable and Other Subscription Programming		3								1
517110	Wired Telecommunications		2	2						9	1

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	Carriers										
517210	Wireless Telecommunications Carriers (except Satellite)		6					1		6	
517410	Satellite Telecommunications									1	
517911	Telecommunications Resellers		7	1		1				23	
517919	All Other Telecommunications		3	1						6	
518210	Data Processing, Hosting, and Related Services		1	6				1		1	
519120	Libraries and Archives		2					8		9	
519130	Internet Publishing and Broadcasting and Web Search Portals		1					10			
519190	All Other Information Services		1	1							
522110	Commercial Banking		1	1						6	7
522120	Savings Institutions								1	1	
522130	Credit Unions		8	2		1		1		9	
522220	Sales Financing		1	1				1		1	
522291	Consumer Lending		1								
522292	Real Estate Credit						1				
522298	All Other Nondepository Credit Intermediation		1							2	
522310	Mortgage and Nonmortgage Loan Brokers		1	1						1	
522320	Financial Transactions Processing, Reserve, and		1								1

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	Clearinghouse Activities										
522390	Other Activities Related to Credit Intermediation		1							1	
523110	Investment Banking and Securities Dealing									1	
523910	Miscellaneous Intermediation	1	4	3		1				3	1
523920	Portfolio Management									2	
523930	Investment Advice	1	5	1				1		3	1
523991	Trust, Fiduciary, and Custody Activities									2	
524113	Direct Life Insurance Carriers			4						1	
524114	Direct Health and Medical Insurance Carriers							1		3	4
524126	Direct Property and Casualty Insurance Carriers		1	1				1		5	
524128	Other Direct Insurance (except Life, Health, and Medical) Carriers										1
524210	Insurance Agencies and Brokerages			1						4	2
525110	Pension Funds		2					1			
525910	Open-End Investment Funds									1	
531110	Lessors of Residential Buildings and Dwellings	1	19	4	2			13		23	2

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531120	Lessors of Nonresidential Buildings (except Miniwarehouses)		12	15				12	1	31	2
531190	Lessors of Other Real Estate Property		2					1		2	1
531210	Offices of Real Estate Agents and Brokers		23	30	2	3		28	1	72	24
531311	Residential Property Managers									1	
531312	Nonresidential Property Managers	1	6	1				17		8	
531390	Other Activities Related to Real Estate		1								
532111	Passenger Car Rental		1	1							7
532112	Passenger Car Leasing										1
532120	Truck, Utility Trailer, and RV (Recreational Vehicle) Rental and Leasing		1	1				3			
532220	Formal Wear and Costume Rental		1							1	
532230	Video Tape and Disc Rental	1					1				
532299	All Other Consumer Goods Rental									2	1
532411	Commercial Air, Rail, and Water Transportation Equipment Rental and Leasing	1	1			3		1			1
532412	Construction, Mining, and Forestry Machinery and Equipment Rental and Leasing			1		4				14	3

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532490	Other Commercial and Industrial Machinery and Equipment Rental and Leasing		13	1				4		4	2
541110	Offices of Lawyers		4	1				2		5	
541213	Tax Preparation Services						1				
541219	Other Accounting Services		1	2				1		3	
541310	Architectural Services									4	
541320	Landscape Architectural Services		7			2				3	
541330	Engineering Services		21	2		5		4		3	6
541380	Testing Laboratories		1							9	
541410	Interior Design Services			1							
541430	Graphic Design Services	1	1								
541490	Other Specialized Design Services										2
541511	Custom Computer Programming Services		2	2						1	1
541512	Computer Systems Design Services		1	5						5	
541513	Computer Facilities Management Services			2							
541519	Other Computer Related Services										1
541611	Administrative Management and General Management Consulting Services		12	52		5	9	2	2	12	3
541613	Marketing Consulting Services						2				
541618	Other Management Consulting Services		27	1		3		2		24	

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541620	Environmental Consulting Services	1	15		1	3		5		22	2
541690	Other Scientific and Technical Consulting Services		10	4	1	6		4		1	8
541711	Research and Development in Biotechnology		4			2		2	1	2	11
541712	Research and Development in the Physical, Engineering, and Life Sciences (except Biotechnology)		16			1		5		15	4
541720	Research and Development in the Social Sciences and Humanities		1					6		3	
541810	Advertising Agencies	1	2	1						2	4
541820	Public Relations Agencies		1							1	
541850	Outdoor Advertising		2								1
541860	Direct Mail Advertising		2							1	
541890	Other Services Related to Advertising		3								
541910	Marketing Research and Public Opinion Polling							2		2	
541922	Commercial Photography									1	
541930	Translation and Interpretation Services		1								
541940	Veterinary Services		2							1	
541990	All Other Professional, Scientific, and Technical Services		15	2		4	2	3	1	43	28

Table 2 - Permits Dispositioned by NAICS Code

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	Total Applications:	451	3774	1236	42	864	71	857	282	2927	910
NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
551112	Offices of Other Holding Companies		8	6				3			
561110	Office Administrative Services		6	5		9		6	1	15	7
561210	Facilities Support Services		1	1						64	2
561311	Employment Placement Agencies					2					
561320	Temporary Help Services									1	
561440	Collection Agencies									1	2
561499	All Other Business Support Services		24	8		3		3		20	3
561510	Travel Agencies					1				1	
561599	All Other Travel Arrangement and Reservation Services		1					2		1	
561612	Security Guards and Patrol Services		1								
561621	Security Systems Services (except Locksmiths)		1								2
561622	Locksmiths		1								
561710	Exterminating and Pest Control Services									1	
561720	Janitorial Services		6	5		1				2	6
561730	Landscaping Services		9	3				1			
561740	Carpet and Upholstery Cleaning Services					1					
561790	Other Services to Buildings and Dwellings		7	1							3
561910	Packaging and Labeling Services			19							

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	Total Applications:	451	3774	1236	42	864	71	857	282	2927	910
NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
561920	Convention and Trade Show Organizers		1								1
561990	All Other Support Services	1	19	11		1		7		9	10
562111	Solid Waste Collection			12		4					
562112	Hazardous Waste Collection		2			1		5	1		
562211	Hazardous Waste Treatment and Disposal	14	5	3		5					
562212	Solid Waste Landfill	1	39	1		21	4	50	9	1	2
562213	Solid Waste Combustors and Incinerators							2	2	1	
562219	Other Nonhazardous Waste Treatment and Disposal	1	26			7		3	1	2	
562910	Remediation Services		11			3		1		54	28
562920	Materials Recovery Facilities		31			7		7	1		1
562991	Septic Tank and Related Services		1					3			
562998	All Other Miscellaneous Waste Management Services		18			16					
611110	Elementary and Secondary Schools		27	7		2		15		152	18
611210	Junior Colleges		20		1	2		35	1	9	
611310	Colleges, Universities, and Professional Schools		49	2	1	1		35	4	36	
611519	Other Technical and Trade Schools									4	
611610	Fine Arts Schools		1								
611620	Sports and Recreation Instruction									1	

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NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
611691	Exam Preparation and Tutoring									1	
611699	All Other Miscellaneous Schools and Instruction		1	1						2	
611710	Educational Support Services		1	1						1	
621111	Offices of Physicians (except Mental Health Specialists)		20	6		1		12		17	1
621112	Offices of Physicians, Mental Health Specialists									1	
621210	Offices of Dentists		1	1				1		5	
621310	Offices of Chiropractors									1	
621340	Offices of Physical, Occupational and Speech Therapists, and Audiologists		1								
621420	Outpatient Mental Health and Substance Abuse Centers		1	1					1	1	
621491	HMO Medical Centers							2		3	
621492	Kidney Dialysis Centers		1								
621493	Freestanding Ambulatory Surgical and Emergency Centers									1	
621511	Medical Laboratories			1				1		4	
621512	Diagnostic Imaging Centers									1	
621610	Home Health Care Services		1	3				5		2	1
621991	Blood and Organ Banks			1						3	

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NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
621999	All Other Miscellaneous Ambulatory Health Care Services		5		1	1		2		7	
622110	General Medical and Surgical Hospitals		32	7	1	3		13	7	31	6
622210	Psychiatric and Substance Abuse Hospitals									4	
622310	Specialty (except Psychiatric and Substance Abuse) Hospitals									3	
623110	Nursing Care Facilities (Skilled Nursing Facilities)		6	1		1		2		8	5
623220	Residential Mental Health and Substance Abuse Facilities									1	
623311	Continuing Care Retirement Communities		2		1					1	
623312	Assisted Living Facilities for the Elderly		1					3		1	
623990	Other Residential Care Facilities		3							2	
624110	Child and Youth Services		1								
624120	Services for the Elderly and Persons with Disabilities									1	
624190	Other Individual and Family Services		11			1		1		2	2
624230	Emergency and Other Relief Services										1
624410	Child Day Care Services		1					4		3	
711211	Sports Teams and Clubs									2	1

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NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
711219	Other Spectator Sports		1					1			1
711410	Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures		2								
711510	Independent Artists, Writers, and Performers		1			1		1		1	
712110	Museums		2					2		5	
712130	Zoos and Botanical Gardens		1								
713110	Amusement and Theme Parks	6	11					5	3	2	
713910	Golf Courses and Country Clubs		7					1		3	
713920	Skiing Facilities			22		4			1		
713940	Fitness and Recreational Sports Centers		3	7				11		54	4
713990	All Other Amusement and Recreation Industries		1								
721110	Hotels (except Casino Hotels) and Motels		11	11	2			28		34	6
721191	Bed-and-Breakfast Inns										5
722000	Food Services and Drinking Places										1
722310	Food Service Contractors		2			2					
722320	Caterers			2				6		4	3
722330	Mobile Food Services									1	
722410	Drinking Places (Alcoholic Beverages)		1					1		4	3
722511	Full-Service Restaurants		11	12		6		6		50	47

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NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
722513	Limited-Service Restaurants	2	12	3				2		94	31
722514	Cafeterias, Grill Buffets, and Buffets									1	
722515	Snack and Nonalcoholic Beverage Bars		1							1	
811111	General Automotive Repair	2	25	23		2				1	17
811112	Automotive Exhaust System Repair	1	2								
811118	Other Automotive Mechanical and Electrical Repair and Maintenance	1	8							1	2
81121	Automotive Body, Paint, and Interior Repair and Maintenance	8	100	97	1	16					48
81122	Automotive Glass Replacement Shops		1								
811192	Car Washes		7								2
811198	All Other Automotive Repair and Maintenance		6	4						2	1
811211	Consumer Electronics Repair and Maintenance		9	9		1				1	
811212	Computer and Office Machine Repair and Maintenance		1							5	
811213	Communication Equipment Repair and Maintenance										14
811219	Other Electronic and Precision Equipment Repair and Maintenance		3							2	1

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NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
811310	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Mai	3	17			1					1
811412	Appliance Repair and Maintenance		4	9						5	2
811420	Reupholstery and Furniture Repair		5								4
811490	Other Personal and Household Goods Repair and Maintenance		2	1							1
812111	Barber Shops									1	
812112	Beauty Salons		4							1	
812113	Nail Salons									1	
812210	Funeral Homes and Funeral Services	1	6	2							
812220	Cemeteries and Crematories	1	4			2		3		2	
812300	Drycleaning and Laundry Services			1							
812310	Coin-Operated Laundries and Drycleaners		2	1		2					1
812320	Drycleaning and Laundry Services (except Coin-Operated)		63	34		1		1		1	43
812331	Linen Supply	1	6	8				3	2		1
812332	Industrial Launderers		1					3			2
812910	Pet Care (except Veterinary) Services		1								

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812921	Photofinishing Laboratories (except One-Hour)			1						2	
812930	Parking Lots and Garages									1	
812990	All Other Personal Services		3	2	1					3	
813110	Religious Organizations		6		1			2		12	1
813212	Voluntary Health Organizations		1								
813312	Environment, Conservation and Wildlife Organizations									1	
813410	Civic and Social Organizations		5	1				4		10	2
813910	Business Associations									2	
813920	Professional Organizations		1					1		1	
813990	Other Similar Organizations (except Business, Professional, Labor, and Political Organizations)		1			2				7	3
921110	Executive Offices		24	1	3	1		3		27	6
921120	Legislative Bodies		1							1	1
921130	Public Finance Activities			1						1	
921190	Other General Government Support		9			1		1		8	5
922110	Courts		4					2		20	1
922120	Police Protection		8	1	1			4		15	5
922130	Legal Counsel and Prosecution									3	1
922140	Correctional Institutions	2	3					2		3	7
922150	Parole Offices and Probation		2							7	

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	Offices										
922160	Fire Protection		6					1		6	
922190	Other Justice, Public Order, and Safety Activities		1							2	
923110	Administration of Education Programs									3	
923120	Administration of Public Health Programs		2							4	
923130	Administration of Human Resource Programs (except Education, Public Health, and Veterans' Affairs P		3							4	
923140	Administration of Veterans' Affairs										1
924110	Administration of Air and Water Resource and Solid Waste Management Programs	4	24					13		6	15
924120	Administration of Conservation Programs		9					6		3	
925110	Administration of Housing Programs										2
925120	Administration of Urban Planning and Community and Rural Development							2		1	
926110	Administration of General Economic Programs									1	
926120	Regulation and Administration of Transportation Programs	5	9		1	2		1		4	6

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926130	Regulation and Administration of Communications, Electric, Gas, and Other Utilities		2					1			
927110	Space Research and Technology		2						2		
928110	National Security	2	3					8	1	4	
999990	Unclassified	1	19	12	2	1	3	14		40	14

Emission Reduction Credit (ERC) and Short Term Emission Reduction Credit (STERC) Transactions for Fiscal Year 2016-17⁴ (California Health and Safety Code Section 40452)

Pursuant to paragraph (c) of section 40452 of the California Health and Safety Code, this report summarizes data on emission offset transactions and applications, by pollutant, during the previous fiscal year. Note that during Fiscal Year 2016-17, no applications were denied for a permit for a new source for the reason of failure to provide the required emission offsets.

Table 3 summarizes privately held Emission Reduction Credit (ERC) and Short Term Emission Reduction Credit (STERC) transactions for Fiscal Year 2016-17, including totals, by pollutant, of the number of emission offset transactions and the quantity of emission offsets transferred in units of pounds per day and tons per year. Table 4 summarizes ERC banking applications processed during Fiscal Year 2016-17, including the number of newly generated STERCs by pollutant in units of pounds per day and tons per year.

Tables 5 and 6 provide details on the amount of each emission offset transaction and processed ERC banking application respectively.

Table 3: Emission Offset Transactions – Fiscal Year 2016-17

Criteria Pollutant	Number of Emission Offset Transfer Transactions ⁵				Quantity of Emission Offsets Transferred ⁶ (lb/day)				Annualized Quantity of Emission Offsets Transferred ³ (ton/year)			
	ERC	STERC ⁷	STERC ⁸	TOTAL	ERC	STERC ⁴	STERC ⁵	TOTAL	ERC	STERC ⁴	STERC ⁵	TOTAL
ROG	33	7	0	40	395	82	0	477	72.2	14.9	0	87.1
NOX	0	9	0	9	0	18	0	18	0	3.4	0	3.4
SOX	3	0	0	3	47	0	0	47	8.6	0	0	8.6
CO	0	0	0	0	0	0	0	0	0	0	0	0
PM10	0	0	0	0	0	0	0	0	0	0	0	0

Table 4: Emission Offset Applications – Fiscal Year 2016-17

Criteria Pollutant	Number of Banking Applications Resulting in the Issuance of New STERCs ⁹	Quantity of Emission Reductions Achieved (STERCs) ¹⁰ (lb/day)	Annualized Quantity of Emission Reductions Achieved ⁷ (ton/year)
ROG	0	0	0
NOX	0	0	0
SOX	0	0	0
CO	0	0	0
PM10	0	0	0

⁴ This report does not include RECLAIM Trading Credit (RTC) transactions.

⁵ Includes all emission offset certificates that transferred ownership.

⁶ Includes the total amount of emission offsets transferred.

⁷ STERC transfer transactions including the long term emission offset, those that have an ending year of 9999.

⁸ STERC transfer transactions not including the long term emission offset in which the emission offset with the greatest year is treated like a long term emission offset.

⁹ Includes all emission offset applications resulting in the generation of new certificates.

¹⁰ Includes the total amount of emission offsets generated.

**Table 5: Emission Offset Transaction Summary – Fiscal Year 2016-17
Sorted by Pollutant and Amount**

SCAQMD NO.	POLLUTANT	AMOUNT (LB/DAY)	AMOUNT (TON/YR)	TYPE	START YEAR	END YEAR
SC1617-001	ROG	4	0.7	ERC	N/A	N/A
SC1617-002	ROG	14	2.6	ERC	N/A	N/A
SC1617-003	ROG	18	3.3	ERC	N/A	N/A
SC1617-004	ROG	0	0	STERC	2016	2016
SC1617-005	ROG	0	0	STERC	2017	2017
SC1617-006	ROG	0	0	STERC	2018	2018
SC1617-007	ROG	12	2.2	STERC	2019	9999
SC1617-008	ROG	0	0	STERC	2016	2016
SC1617-009	ROG	0	0	STERC	2017	2017
SC1617-010	ROG	0	0	STERC	2018	2018
SC1617-011	ROG	0	0	STERC	2019	2019
SC1617-012	ROG	0	0	STERC	2020	2020
SC1617-013	ROG	4	0.7	STERC	2021	9999
SC1617-014	ROG	0	0	STERC	2016	2016
SC1617-015	ROG	0	0	STERC	2017	2017
SC1617-016	ROG	0	0	STERC	2018	2018
SC1617-017	ROG	9	1.6	STERC	2019	9999
SC1617-018	ROG	1	0.2	ERC	N/A	N/A
SC1617-019	ROG	0	0	STERC	2016	2016
SC1617-020	ROG	0	0	STERC	2017	2017
SC1617-021	ROG	0	0	STERC	2018	2018
SC1617-022	ROG	6	1.1	STERC	2019	9999
SC1617-023	ROG	11	2	ERC	N/A	N/A
SC1617-024	ROG	19	3.5	ERC	N/A	N/A
SC1617-025	ROG	4	0.7	ERC	N/A	N/A
SC1617-026	ROG	11	2	ERC	N/A	N/A
SC1617-027	ROG	0	0	STERC	2016	2016
SC1617-028	ROG	0	0	STERC	2017	2017
SC1617-029	ROG	0	0	STERC	2018	2018
SC1617-030	ROG	45	8.2	STERC	2019	9999
SC1617-031	ROG	1	0.2	ERC	N/A	N/A
SC1617-032	ROG	3	0.5	ERC	N/A	N/A
SC1617-033	ROG	4	0.7	ERC	N/A	N/A
SC1617-034	ROG	10	1.8	ERC	N/A	N/A
SC1617-035	ROG	7	1.3	ERC	N/A	N/A
SC1617-036	ROG	1	0.2	ERC	N/A	N/A
SC1617-037	ROG	0	0	STERC	2016	2016
SC1617-038	ROG	0	0	STERC	2017	2017
SC1617-039	ROG	0	0	STERC	2018	2018
SC1617-040	ROG	5	0.9	STERC	2019	9999
SC1617-041	ROG	0	0	STERC	2016	2016
SC1617-042	ROG	0	0	STERC	2017	2017

SCAQMD NO.	POLLUTANT	AMOUNT (LB/DAY)	AMOUNT (TON/YR)	TYPE	START YEAR	END YEAR
SC1617-043	ROG	0	0	STERC	2018	2018
SC1617-044	ROG	1	0.2	STERC	2019	9999
SC1617-045	ROG	70	12.8	ERC	N/A	N/A
SC1617-046	ROG	10	1.8	ERC	N/A	N/A
SC1617-047	ROG	6	1.1	ERC	N/A	N/A
SC1617-048	ROG	3	0.5	ERC	N/A	N/A
SC1617-049	ROG	1	0.2	ERC	N/A	N/A
SC1617-050	ROG	20	3.7	ERC	N/A	N/A
SC1617-051	ROG	1	0.2	ERC	N/A	N/A
SC1617-052	ROG	1	0.2	ERC	N/A	N/A
SC1617-053	ROG	5	0.9	ERC	N/A	N/A
SC1617-054	ROG	1	0.2	ERC	N/A	N/A
SC1617-055	ROG	17	3.1	ERC	N/A	N/A
SC1617-056	ROG	35	6.4	ERC	N/A	N/A
SC1617-057	ROG	1	0.2	ERC	N/A	N/A
SC1617-058	ROG	12	2.2	ERC	N/A	N/A
SC1617-059	ROG	4	0.7	ERC	N/A	N/A
SC1617-060	ROG	6	1.1	ERC	N/A	N/A
SC1617-061	ROG	4	0.7	ERC	N/A	N/A
SC1617-062	ROG	19	3.5	ERC	N/A	N/A
SC1617-063	ROG	71	13	ERC	N/A	N/A
Total		477	87.1		N/A	

SCAQMD NO.	POLLUTANT	AMOUNT (LB/DAY)	AMOUNT (TON/YR)	TYPE	START YEAR	END YEAR
SC1617-064	NOX	6	1.1	STERC	2016	9999
SC1617-065	NOX	3	0.5	STERC	2016	9999
SC1617-066	NOX	2	0.4	STERC	2016	9999
SC1617-067	NOX	2	0.4	STERC	2016	9999
SC1617-068	NOX	1	0.2	STERC	2016	9999
SC1617-069	NOX	1	0.2	STERC	2016	9999
SC1617-070	NOX	1	0.2	STERC	2016	9999
SC1617-071	NOX	1	0.2	STERC	2016	9999
SC1617-072	NOX	1	0.2	STERC	2016	9999
Total		18	3.4		N/A	

SCAQMD NO.	POLLUTANT	AMOUNT (LB/DAY)	AMOUNT (TON/YR)	TYPE	START YEAR	END YEAR
SC1617-073	SOX	1	0.2	ERC	N/A	N/A
SC1617-074	SOX	26	4.7	ERC	N/A	N/A
SC1617-075	SOX	20	3.7	ERC	N/A	N/A
Total		47	8.6	N/A		

SCAQMD NO.	POLLUTANT	AMOUNT (LB/DAY)	AMOUNT (TON/YR)	TYPE	START YEAR	END YEAR
N/A	CO	No Records				
Total		0	0	N/A		

SCAQMD NO.	POLLUTANT	AMOUNT (LB/DAY)	AMOUNT (TON/YR)	TYPE	START YEAR	END YEAR
N/A	PM10	No Records				
Total		0	0	N/A		

**Table 6: Emission Offset Application Summary – Fiscal Year 2016-17
Sorted by Pollutant and Amount**

SCAQMD NO.	POLLUTANT	AMOUNT (LB/DAY)	AMOUNT (TON/YR)	TYPE	START YEAR	END YEAR
No Banking Application Approved during Fiscal Year 2016-2017						
Total		N/A	N/A	N/A		

CHAPTER III
FISCAL YEAR 2018-2019 BUDGET

[Attached herein as Chapter III]

Due to the bulk of these materials, Chapter III is available online at <http://www.aqmd.gov/docs/default-source/LPA-Outreach/sb-1928-report-to-legislature-july-2018.pdf?sfvrsn=8>. Anyone who would like to obtain a hard copy may do so by contacting SCAQMD's Public Information Center at (909) 396-2001.

**CHAPTER IV
CLEAN FUELS PROGRAM 2017 ANNUAL REPORT AND 2018 PLAN UPDATE**

[Attached herein as Chapter IV]

Due to the bulk of these materials, Chapter IV is available online at <http://www.aqmd.gov/docs/default-source/LPA-Outreach/sb-1928-report-to-legislature-july-2018.pdf?sfvrsn=8>. Anyone who would like to obtain a hard copy may do so by contacting SCAQMD's Public Information Center at (909) 396-2001.

CHAPTER V
ANNUAL RECLAIM AUDIT REPORT
FOR 2016 COMPLIANCE YEAR

[Attached herein as Chapter V]

Due to the bulk of these materials, Chapter V is available online at <http://www.aqmd.gov/docs/default-source/LPA-Outreach/sb-1928-report-to-legislature-july-2018.pdf?sfvrsn=8>. Anyone who would like to obtain a hard copy may do so by contacting SCAQMD's Public Information Center at (909) 396-2001.

 [Back to Agenda](#)

BOARD MEETING DATE: July 6, 2018

AGENDA NO. 12

REPORT: Hearing Board Report

SYNOPSIS: This reports the actions taken by the Hearing Board during the period of May 1 through May 31, 2018.

COMMITTEE: No Committee Review

RECOMMENDED ACTION:
Receive and file.

Julie Prussack
Chairman of Hearing Board

DG

Two summaries are attached: **May 2018 Hearing Board Cases and Rules From Which Variances and Orders for Abatement Were Requested in 2018**. An Index of District Rules is also attached.

The total number of appeals filed during the period May 1 to May 31, 2018 is 0; and total number of appeals filed during the period of January 1 to May 31, 2018 is 0.

Report of May 2018 Hearing Board Cases

Case Name and Case No. (SCAQMD Attorney)	Rules	Reason for Petition	District Position/ Hearing Board Action	Type and Length of Variance or Order	Excess Emissions
1. Beverly Hills Unified School District Case No. 6107-1 (D. Hsu)	203(b)	Petitioner requested to vent oil wells on school property to atmosphere to relieve dangerous pressure buildup.	Not Opposed/Granted	Ex Parte EV granted commencing 5/4/18 and continuing through 5/8/18, when the SV hearing is scheduled.	VOC: TBD by 5/23/18
2. Beverly Hills Unified School District Case No. 6107-1 (N. Sanchez)	N/A	Petitioner requested a waiver of excess emission fees arguing that they were unfair, given that the oil wells were inherited by the School District when the operator went out of business and abandoned them.	No Position/Denied	Petitioner withdrew its request for variance coverage. The Board denied Petitioner's request for waiver of payment of excess emissions fees for the Ex Parte EV period.	N/A
3. City of Rialto (Owner) and Veolia Water West Operating Services (Operator) Case No. 6105-1 (D. Hsu)	203(b) 431.1(c)(2)	Petitioner sought variance from H2S emission limits from its digester, due to unanticipated upset.	Not Opposed/Denied	SV denied.	N/A
4. SCAQMD vs Trojan Battery Company, LLC. Case No. 6099-1 (N. Feldman & B. Tomasovic)	1420.2	Respondent sought to modify stipulated O/A to allow additional time to fully enclose its wastewater system.	Stipulated/Issued	Mod. O/A issued commencing 5/9/18; the Hearing Board shall continue to retain jurisdiction over this matter until 12/31/18.	N/A

Acronyms

AOC: Alternative Operating Conditions
 CEMS: Continuous Emissions Monitoring System
 CO: Carbon Monoxide
 EV: Emergency Variance
 FCD: Final Compliance Date
 H&S: Health and Safety Code
 H2S: Hydrochloric Sulfide
 Mod. O/A: Modification Order for Abatement
 N/A: Not Applicable
 NOx: Oxides of Nitrogen
 O/A: Order for Abatement
 PM: Particulate Matter
 PPM: Parts Per Million
 RV: Regular Variance
 SOx: Oxides of Sulfur
 TBD: To Be Determined
 VOC: Volatile Organic Compounds

Rules from which Variances and Orders for Abatement were Requested in 2018

	2018	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Actions
# of HB Actions Involving Rules														
109(c)(1)				1										1
203(a)				2										2
203(b)		2	4	2	4	2								14
431.1(c)(2)					2	1								2
1110.2(d)(1)(L)				1										1
1147(c)(1)		1												1
1407				1										1
1420.2				2		1								3
2004(f)(1)		2	3		2									7
2011(c)(2)(A)		1												1
2011(c)(2)(B)		1												1
2011(e)(1)		1												1
2012(c)(2)(A)		1												1
2012(c)(2)(B)		1												1
2012(g)(1)		1												1
3002(c)		1												1
3002(c)(1)		1	3		3									7

**DISTRICT RULES AND REGULATIONS INDEX
FOR 2018 HEARING BOARD CASES AS OF MAY 31, 2018**

REGULATION I – GENERAL PROVISIONS

Rule 109 Recordkeeping for Volatile Organic Compound Emissions

REGULATION II – PERMITS

Rule 203 Permit to Operate

REGULATION IV –

Rule 431.1 Sulfur Content of Gaseous Fuels

REGULATION XI - SOURCE SPECIFIC STANDARDS

Rule 1110.2 Emissions from Gaseous- and Liquid-Fueled Internal Combustion Engines

Rule 1147 NOx Reductions from Miscellaneous Sources

REGULATION XIV – TOXICS AND OTHER NON-CRITERIA POLLUTANTS

Rule 1407 Control of Emissions of Arsenic, Cadmium, and Nickel from Non-Ferrous Metal Melting Operations

Rule 1420.2 Emission Standard for Lead from Metal Melting Facilities

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

BOARD MEETING DATE: July 6, 2018

AGENDA NO. 13

REPORT: Civil Filings and Civil Penalties Report

SYNOPSIS: This reports the monthly penalties from May 1 through May 31, 2018, and legal actions filed by the General Counsel's Office from May 1 through May 31, 2018. An Index of District Rules is attached with the penalty report.

COMMITTEE: Stationary Source, June 15, 2018, Reviewed

RECOMMENDED ACTION:
Receive and file.

Bayron T. Gilchrist
General Counsel

BTG:ew

Civil Filings

Violations

1. GARDENERS COMMUNITY RECYCLING
Los Angeles Superior Court - Pomona
Case No. KC070293; Filed 5.17.18 (WBW)
P64552, P64563, and P64566
R. 203 – Operating Without a Valid Permit to Operate

1

1 Violation

Attachments

May 2018 Penalty Report
Index of District Rules and Regulations

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
General Counsel's Office**

May 2018 Settlement Penalty Report

<u>Total Penalties</u>	
Civil Settlements:	\$698,950.00
Self-Reported Settlements:	\$2,500.00
MSPAP Settlements:	\$18,900.00
Hearing Board Settlements:	\$32,500.00
Total Cash Settlements:	\$752,850.00
Total SEP Value:	\$0.00
Fiscal Year through 5/2018 Cash Total:	\$10,729,426.43
Fiscal Year through 5/2018 SEP Value Only Total:	\$2,120,000.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
Civil Settlements						
57390	ADVANCE TRUCK PAINTING INC	3002(c)(1) 3003	5/11/2018	SH	P64456	\$750.00
179817	AIRPORT 76, 7-ELEVEN	203 (a) 461(e)(2) 41960.2	5/11/2018	BST	P61262 P65725 P65729 P65748	\$5,000.00
167066	ARLON GRAPHICS L.L.C.	2012	5/23/2018	ML	P62509	\$5,000.00
153992	CANYON POWER PLANT	2004	5/15/2018	SH	P60570	\$750.00
800030	CHEVRON PRODUCTS CO.	1173 2004(f)(1) 203 (b) 3002(c)(1) 1176(e)(1) 1176(e)(2)(B)	5/1/2018	NSF	P58232 P58233 P58235 P60561	\$43,500.00
2526	CHEVRON USA INC	3002	5/10/2018	NSF	P52628 P59380	\$5,000.00
143740	DCOR LLC	1173	5/25/2018	BST	P60281	\$3,000.00
156741	HARBOR COGENERATION CO, LLC	2012(c)(3)(A)	5/18/2018	WBW	P60578	\$5,100.00
158080	KARNAK CORP.	314	5/2/2018	WBW	P64814	\$3,000.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
800075	LA CITY, DWP SCATTERGOOD GENERATING STN	2004(f)(1) 203(b) 3002(c)(1)	5/23/2018	NSF	P60560 P60574	\$10,800.00
127770	LA CO - CAMP KILPATRICK TREATMENT PLANT	42401	5/15/2018	NSF	P60534	\$25,000.00
86790	LA VERNE CAR WASH	203(b) 461(c)(2)(B)	5/31/2018	SH	P63107	\$4,000.00
27704	MILE SQUARE GOLF COURSE	402 41700	5/1/2018	NAS	P63858	\$2,500.00
10656	NEWPORT LAMINATES	3003	5/24/2018	BST	P63863	\$2,000.00
800409	NORTHROP GRUMMAN SYSTEMS CORPORATION	2004	5/31/2018	BST	P64377	\$1,800.00
12182	PARK LA BREA	3002	5/23/2018	ML	P60140	\$4,000.00
182451	REYES ENERGY	402 41700	5/1/2018	DH	P65213	\$3,250.00
161300	SAPA EXTRUDER, INC	2004	5/1/2018	WBW	P65374	\$1,000.00
14926	SEMPRA ENERGY (THE GAS CO)	2012(c)(2)(A) 3002(c)(1) 402 2004(f)(1) 2012 Appen A 203(b) 41700 203(a)	5/18/2018	NSF	P59387 P59389 P59393 P59395 P59397 P60288 P60292 P60293 P60567 P60586 P61740	\$550,000.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
					P62953	
					P62959	
					P62964	
					P63256	
					P63258	
					P63259	
					P63260	
					P66502	
					P67701	
166764	SHELL	203(b) 461(c)	5/15/2018	WBW	P64328 KC070096	\$2,000.00
800338	SPECIALTY PAPER MILLS INC	2004	5/10/2018	ML	P62062	\$500.00
18931	TAMCO	2004(d) 2011(c)(3)(A) 2012(c)(3)(A)	5/15/2018	NSF	P64419	\$20,000.00
24450	TREND MANOR FURNITURE MFG. CO., INC	3002(c)(1) 3003	5/1/2018	NSF	P59641 P64451	\$1,000.00

Total Civil Settlements: \$696,950.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
Self-Reported Settlements						
156146	KAISER FOUNDATION HOSPITAL	1146	5/15/2018	RFL		\$2,500.00

Total Self-Reported Settlements: \$2,500.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
MSPAP Settlements						
184940	GREYSTAR	403(d)(1) 403(d)(2)	5/10/2018	GC	P65259	\$2,600.00
119315	HOME DEPOT, USA INC	1470 203(b)	5/10/2018	GC	P65557	\$4,500.00
169463	INSTITUTE FOR ADVANCED HEALTH, NANT HOLD	1415	5/10/2018	GC	P63682	\$600.00
155794	LAX WHEEL REFINISHING INC	201 203(a) 203(b)	5/23/2018	TF	P65256	\$500.00
186340	MDM CONSTRUCTION CO	403(d)(2)	5/23/2018	TF	P65056	\$500.00
109396	NAVIZADEH MINIMART & GAS, K & F NAVI INC	461(c)(2)(B)	5/10/2018	TF	P60099	\$500.00
181537	PDQ RENTALS	461(e)(2)(C)	5/10/2018	TF	P66554	\$700.00
122529	SULLY MILLER CONTRACTING CO.	403(d)(1) 403(d)(2)	5/23/2018	GV	P63916	\$6,000.00
177862	THE MADISON CLUB	203	5/10/2018	TF	P63138	\$800.00
181801	UNITED PACIFIC #5695	203	5/3/2018	GV	P64980	\$1,600.00
131433	VALLEJO MINI MARKET & GAS STATION	41960.2 461	5/10/2018	TF	P64991	\$600.00

Total MSPAP Settlements: \$18,900.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
Hearing Board Settlements						
160245	GATEWAY CREMATORY, SMART CREMATION CA	1147	5/11/2018	BST	6095-1	\$32,500.00

Total Hearing Board Settlements: \$32,500.00

DISTRICT'S RULES AND REGULATIONS INDEX FOR MAY 2018 PENALTY REPORT

REGULATION II - PERMITS

List and Criteria Identifying Information Required of Applicants Seeking A Permit to Construct from the South Coast Air Quality Management District

- Rule 201 Permit to Construct
- Rule 203 Permit to Operate

REGULATION III - FEES

- Rule 314 Fees for Architectural Coatings

REGULATION IV - PROHIBITIONS

- Rule 402 Nuisance
- Rule 403 Fugitive Dust (*Pertains to solid particulate matter emitted from man-made activities.*)
- Rule 461 Gasoline Transfer and Dispensing

REGULATION XI - SOURCE SPECIFIC STANDARDS

- Rule 1146 Emissions of Oxides of Nitrogen from Industrial, Institutional and Commercial Boilers, Steam Generators, and Process Heaters
- Rule 1147 Nox Reductions From Miscellaneous Sources
- Rule 1173 Fugitive Emissions of Volatile Organic Compounds
- Rule 1176 Sumps and Wastewater Separators

REGULATION XIV - TOXICS

- Rule 1415 Reduction of Refrigerant Emissions from Stationary Refrigeration and Air Conditioning Systems
- 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
- Rule 2011 Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (SO_x) Emissions
- Rule 2012 Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NO_x) Emissions

REGULATION XXX TITLE V PERMITS

Rule 3002 Requirements
Rule 3003 Applications

CALIFORNIA HEALTH AND SAFETY CODE

41700 Violation of General Limitations
41960.2 Gasoline Vapor Recovery
42401 Violation of Order for Abatement

[↑ Back to Agenda](#)

BOARD MEETING DATE: July 6, 2018

AGENDA NO. 14

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 May 1, 2018 and May 31, 2018, and those projects for which the SCAQMD is acting as lead agency pursuant to CEQA.

COMMITTEE: No Committee Review

RECOMMENDED ACTION:
Receive and file.

Wayne Natri
Executive Officer

PF:SN:MK:LS:LW

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 May 1, 2018 through May 31, 2018 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 106 CEQA documents were received during this reporting period and 41 comment letters were sent. Notable projects in this report are: State Route 710 North Project and Gilman Springs Mine in Riverside County.

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. 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; 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 at: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mitigation-measures-and-control-efficiencies>. 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 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 staff testified at a hearing for the proposed project, a notation is provided under the "Comment Status." If there is no notation, then staff did not provide testimony at a hearing for the proposed project.

During the period May 1, 2018 through May 31, 2018, the SCAQMD received 106 CEQA documents. Of the total of 132 documents* listed in Attachments A and B:

- 41 comment letters were sent;
- 38 documents were reviewed, but no comments were made;
- 21 documents are currently under review;
- 24 documents did not require comments (e.g., public notices);
- 0 documents were not reviewed; and
- 8 documents were screened without additional review.

* These statistics are from May 1, 2018 to May 31, 2018 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 four active projects during May.

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
May 01, 2018 to May 31, 2018

SCAQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Warehouse & Distribution Centers LAC180508-10 Norwalk Boulevard Mini-Warehouse Facility	The proposed project consists of construction of a 128,896-square-foot self-storage warehouse and a 1,200-square-foot office on 1.63 acres. The project is located at 11212 Norwalk Boulevard on the southeast corner of Norwalk Boulevard and Kenney Street. Reference LAC180424-10 Comment Period: N/A Public Hearing: 5/14/2018	Notice of Public Hearing	City of Santa Fe Springs	Document does not require comments
Warehouse & Distribution Centers RVC180502-01 Guthrie Industrial Warehouse (Planning Cases P17-0506 (DR), P17-0507 (GE), P17-0748 (GE), and P17-0749 (VR))	The proposed project consists of construction of a 346,290-square-foot warehouse on 22.34 acres. The project is located at 750 Marlborough Avenue and 1550 Research Park Drive near the northeast corner of Marlborough Avenue and Northgate Street. Reference RVC180208-01 and RVC180126-02 Comment Period: N/A Public Hearing: N/A	Response to Comments	City of Riverside	Document reviewed - No comments sent
Warehouse & Distribution Centers RVC180503-05 Agua Mansa Commerce Center - MA16170 (GPA16003, CZ16008, SP16002, and SDP17070)	This document includes a cover page of site plan for the proposed project. The proposed project consists of development of design guideline standards to allow future development of 4,277,000 square feet of industrial uses, 180,000 square feet of business and retail uses, and 67.7 acres of open space on 292 acres. The project is located at 1500 Rubidoux Boulevard on the southeast corner of El Rivino Road and Rubidoux Boulevard. Reference RVC171128-09, RVC170705-15, RVC161216-03 and RVC161006-06 Comment Period: 4/27/2018 - 5/11/2018 Public Hearing: N/A	Site Plan	City of Jurupa Valley	Document reviewed - No comments sent
Warehouse & Distribution Centers RVC180509-01 Agua Mansa Commerce Center - MA16170 (GPA16003, CZ16008, SP16002, and SDP17070)	The proposed project consists of subdivision of 206 acres for future development of 4,277,000 square feet of industrial uses, and 180,000 square feet of business and retail uses. The project is located at 1500 Rubidoux Boulevard on the southeast corner of El Rivino Road and Rubidoux Boulevard. Reference RVC180503-05, RVC171128-09, RVC170705-15, RVC161216-03 and RVC161006-06 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/spaguamansacommerce-052218.pdf Comment Period: 5/9/2018 - 5/23/2018 Public Hearing: N/A	Site Plan	City of Jurupa Valley	SCAQMD staff commented on 5/22/2018

*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
May 01, 2018 to May 31, 2018**

SCAQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<i>Warehouse & Distribution Centers</i> SBC180525-03 Gateway South Building 6 Lena West Project	The proposed project consists of demolition of existing buildings, construction of a 135,500-square-foot warehouse, and expansion of existing storm basin facilities on 17.71 acres. The project is located on the southwest corner of Central Avenue and Valley View Avenue. Comment Period: 6/4/2018 - 6/25/2018 Public Hearing: 6/27/2018	Mitigated Negative Declaration	City of San Bernardino	Document reviewed - No comments sent
<i>Industrial and Commercial</i> LAC180508-11 Conditional Use Permit Case No. 500-7	The proposed project consists of construction of 405 square feet to be added to existing building. The project is located at 11015 Bloomfield Avenue on the southwest corner of Bloomfield Avenue and Lakeland Road. Comment Period: N/A Public Hearing: 5/14/2018	Notice of Public Hearing	City of Santa Fe Springs	Document does not require comments
<i>Industrial and Commercial</i> LAC180517-02 Canyon City Business Center	The proposed project consists of demolition of existing 13,465-square-foot nursery and construction of seven industrial buildings totaling 463,316 square feet on 23.27 acres. The project is located at 1025 North Todd Avenue on the southwest corner of West Sierra Madre Avenue and North Todd Avenue. Reference LAC180221-02 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/deircanyoncitybusiness-060518.pdf Comment Period: 5/17/2018 - 7/2/2018 Public Hearing: 7/25/2018	Draft Environmental Impact Report	City of Azusa	SCAQMD staff commented on 6/5/2018
<i>Industrial and Commercial</i> RVC180515-04 Motte Industrial Park - Extension of Time No. 2018-027 for Plot Plan No. 2011-093	This document consists of request to extend Plot Plan expiration date to April 24, 2022 for the proposed project. The proposed project consists of construction of four industrial buildings totaling 97,564 square feet on 6.71 acres. The project is located near the northwest corner of Antelope Road and McLaughlin Road. Comment Period: N/A Public Hearing: 5/23/2018	Notice of Public Hearing	City of Menifee	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
May 01, 2018 to May 31, 2018**

<u>SCAQMD LOG-IN NUMBER</u> PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<i>Industrial and Commercial</i> RVC180515-05 Rubidoux Commercial Development Project (MA15146)	The proposed project consists of construction of nine industrial buildings totaling 306,894 square feet on 26.4 acres. The project is located on the northwest corner of 20th Street and Vandell Road. Reference RVC170425-04 and RVC151113-01 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/deirrubidouxcommercial-060518.pdf Comment Period: 5/16/2018 - 6/29/2018 Public Hearing: N/A	Notice of Availability of a Draft Environmental Impact Report	City of Jurupa Valley	SCAQMD staff commented on 6/5/2018
<i>Industrial and Commercial</i> RVC180517-01 Gilman Springs Mine (Surface Mining Permit No. 159, Revision No. 2, and Environmental Assessment No. 34079)	The proposed project consists of expansion of mining boundary from 150.4 to 204.8 acres and increase in extraction of mineral reserves from 14,842,574 to 44,000,000 tons. The project is located on the northeast corner of Gilman Springs Road and Bridge Street in the City of Moreno Valley. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/nopgilmansprings-060518.pdf Comment Period: 5/14/2018 - 6/14/2018 Public Hearing: N/A	Notice of Preparation	County of Riverside	SCAQMD staff commented on 6/5/2018
<i>Industrial and Commercial</i> RVC180522-04 Planning Cases P18-0083 (CUP), P18-0084 (GE) and P18-0085 (COA)	The proposed project consists of construction of mausoleum with 512 crypts and 396 in-ground gravesites on 52.7 acres. The project is located at 3300 Central Avenue near the southeast corner of Central Avenue and State Route 91. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/spp180083cup-052918.pdf Comment Period: 5/15/2018 - 6/15/2018 Public Hearing: N/A	Site Plan	City of Riverside	SCAQMD staff commented on 5/29/2018
<i>Industrial and Commercial</i> RVC180524-02 Toscana Village at Temescal Valley	The proposed project consists of construction of 15 commercial buildings totaling 194,100 square feet and a gasoline service station with 12 fueling pumps on 27 acres. The project is located on the northwest corner of Temescal Canyon Road and Indian Truck Trail in the community of Temescal Valley. Reference RVC170705-11 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/deirtoscanavillage-060518.pdf Comment Period: 5/25/2018 - 7/9/2018 Public Hearing: N/A	Draft Environmental Impact Report	County of Riverside	SCAQMD staff commented on 6/5/2018

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<u>SCAQMD LOG-IN NUMBER</u> PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Waste and Water-related LAC180516-01 Cabrillo Mole Ferry Terminal Revitalization Project (Project ID #1617-006)	The proposed project consists of repairs to existing ferry terminal, including reinforcement to wharf structure and installation of pedestrian shade structures. The project is located near the northeast corner of Crescent Avenue and Claressa Avenue. Reference LAC180327-07 Comment Period: N/A Public Hearing: N/A	Response to Comments	City of Avalon	Document reviewed - No comments sent
Waste and Water-related LAC180529-08 Former YRC Wilmington	The proposed project consists of development of remedial actions to clean up petroleum contaminated soil with land fill gas vapor intrusion protection system, establish land use covenant, and restrict groundwater use on 4.7 acres. The project is located at 1531 Blinn Avenue on the northwest corner of North Blinn Avenue and East Sandison Street in the community of Wilmington. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/drawformeryrc-061218.pdf Comment Period: 5/15/2018 - 6/13/2018 Public Hearing: N/A	Revised Draft Removal Action Workplan	Department of Toxic Substances Control	SCAQMD staff commented on 6/12/2018
Waste and Water-related ORC180501-04 Former Diesel Logistics	The proposed project consists of development of interim cleanup plan to treat and reduce chemicals in soil and groundwater with vapor extraction technology. The project is located at 1331 East Warner Avenue on the northeast corner of South Hathaway Street and East Warner Avenue in the City of Santa Ana. Comment Period: 5/1/2018 - 5/30/2018 Public Hearing: N/A	Draft Interim Removal Action Workplan	Department of Toxic Substances Control	Document reviewed - No comments sent
Waste and Water-related ORC180515-06 Cherry Aerospace, 1224 E. Warner Ave., Santa Ana	The proposed project consists of development of remedial actions to reduce volatile organic compounds and 1, 4-dioxane in groundwater and soil on 15.5 acres. The project is located on the southwest corner of Beeson Lane and East Warner Avenue in the City of Santa Ana. Reference LAC150507-09 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/irmwpccherryaerospace-061218.pdf Comment Period: 5/14/2018 - 6/12/2018 Public Hearing: N/A	Interim Remedial Measures Work Plan	Department of Toxic Substances Control	SCAQMD staff commented on 6/12/2018

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<i>Utilities</i> RVC180524-03 Palen Solar PV	The proposed project consists of construction of a 500-megawatt solar photovoltaic electric generating facility with associated infrastructure on 4,200 acres. The project is located near the northeast corner of State Route 177 and Interstate 10 near the community of Desert Center in Riverside County. Reference RVC160722-13, RVC160617-02, RVC130808-02 Comment Period: N/A	Notice of Availability of a Final Supplemental Environmental Impact Statement/ Environmental Impact Report	Bureau of Land Management	Document reviewed - No comments sent
<i>Transportation</i> LAC180501-06 I-110 High-Occupancy Toll Lane Flyover Project	The proposed project consists of construction of off-ramp structure of 1,400 feet in length and 12 feet in width between 30th Street and Figueroa Street Overcrossing in the communities of South and Southeast Los Angeles. Reference LAC160126-04 Comment Period: N/A	Final Mitigated Negative Declaration/ Finding of No Significant Impact	California Department of Transportation	Document reviewed - No comments sent
<i>Transportation</i> LAC180510-05 Asilomar Boulevard Stabilization Project	The proposed project consists of roadway improvements of 600 feet in length and 50 feet in width along Asilomar Boulevard between Almar Avenue and Wynola Street. Reference LAC171003-17 Comment Period: 5/10/2018 - 6/25/2018	Draft Environmental Impact Report	City of Los Angeles	Document reviewed - No comments sent
<i>Transportation</i> LAC180516-03 Rosecrans/Marquardt Grade Separation Project	The proposed project consists of construction of grade-separation of Rosecrans Avenue and Marquardt Avenue from the Burlington Northern Santa Fe railway. The project is located at the intersection of Rosecrans Avenue and Marquardt Avenue. Reference LAC171010-05 Comment Period: 5/16/2018 - 6/15/2018	Draft Environmental Assessment	City of Santa Fe Springs	Document reviewed - No comments sent

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<i>Transportation</i> LAC180518-07 State Route 710 North Project	This document includes updates on cultural resources analysis for the proposed project. The proposed project consists of improvements to mobility to relieve congestion on State Route 710. The project is located near the southwest corner of Interstate 2 and Interstate 605 in the western portion of the San Gabriel Valley of Los Angeles County. Reference LAC170523-03 and LAC150306-02 Comment Period: 5/1/2018 - 7/2/2018 Public Hearing: 6/13/2018	Recirculated Draft Environmental Impact Report/ Supplemental Draft Environmental Impact Statement	California Department of Transportation	Document reviewed - No comments sent
<i>Transportation</i> ORC180509-02 Interstate 5 Improvement Project from Interstate 405 to State Route 55	The proposed project consists of widening of a segment of Interstate 5 by adding one lane from Interstate 405 (Post Mile 21.3) to State Route 55 (Post Mile 30.3). The project traverses through the cities of Irvine and Tustin. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/mndi5improvement-052918.pdf Comment Period: 5/8/2018 - 6/8/2018 Public Hearing: 5/24/2018	Mitigated Negative Declaration	California Department of Transportation	SCAQMD staff commented on 5/29/2018
<i>Transportation</i> RVC180510-04 Temescal Canyon Road Bridge and Road Realignment Project	The proposed project consists of construction of a four-lane bridge of 98 feet in width, 375 feet in length, and five feet in depth over Temescal Wash. The project will also include construction of 200-foot roadways north and south of the bridge and a 649-foot roadway transition from the bridge to existing Temescal Canyon Road. The project is located on the southwest corner of Lake Street and Temescal Canyon Road. Reference RVC180308-02 Comment Period: 5/11/2018 - 6/11/2018 Public Hearing: 7/10/2018	Recirculated Mitigated Negative Declaration	City of Lake Elsinore	Document reviewed - No comments sent
<i>Institutional (schools, government, etc.)</i> LAC180508-05 Thomas Jefferson High School Comprehensive Modernization Project	The proposed project consists of demolition of 116,000 square feet of existing buildings, and construction of 110,000 square feet of new buildings on 18.9 acres. The project would also include modernization of 53,000 square feet of existing buildings. The project is located at 1319 East 41st Street on the northeast corner of Hooper Avenue and East 41st Street in the community of Southeast Los Angeles. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/mndthomasjefferson-052918.pdf Comment Period: 5/8/2018 - 6/7/2018 Public Hearing: 5/22/2018	Mitigated Negative Declaration	Los Angeles Unified School District	SCAQMD staff commented on 5/29/2018

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<i>Medical Facility</i> RVC180515-03 Careage Medical Office Building (General Plan Amendment 17-2504, Zone Change 17-3503 and Design Review 17-7004)	The proposed project consists of construction of a 36,174 square-foot medical office building on 3.31 acres. The project is located on the northeast corner of Sun Lakes Boulevard and Sun Lakes Village Drive. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/mndcareagemedical-052218.pdf Comment Period: 5/11/2018 - 5/31/2018 Public Hearing: 6/6/2018	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Banning	SCAQMD staff commented on 5/22/2018
<i>Retail</i> LAC180503-02 ENV-2015-4704: 2860-2872 W. Olympic Blvd. and 1010-1022 S. Kenmore Ave.	The proposed project consists of demolition of four buildings, a billboard, and a parking lot, and construction of a 19,653-square-foot hotel with 120 rooms and subterranean parking on 142,346 square feet. The project is located on the southeast corner of West Olympic Boulevard and South Kanmore Avenue in the community of Wilshire. Reference LAC171019-03 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/mnd2860wolympic-052918.pdf Comment Period: 5/3/2018 - 6/4/2018 Public Hearing: N/A	Mitigated Negative Declaration	City of Los Angeles	SCAQMD staff commented on 5/29/2018
<i>Retail</i> LAC180503-04 ENV-2016-3751: 1600-1616 1/2 N. Schrader Blvd. & 6533 W. Selma Ave.	The proposed project consists of demolition of parking lot, rehabilitation of a 8,156-square-foot building with 12 residential units, and construction of a 83,605-square-foot hotel with 198 rooms and subterranean parking on 0.62 acres. The project is located on the northeast corner of Schrader Boulevard and Selma Avenue in the community of Hollywood. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/mnndschraderhotel-052918.pdf Comment Period: 5/3/2018 - 6/7/2018 Public Hearing: N/A	Mitigated Negative Declaration	City of Los Angeles	SCAQMD staff commented on 5/29/2018
<i>Retail</i> LAC180510-06 Holiday Inn Express Project (TPM 82071, CUP 24-17, DR 10-17)	The proposed project consists of demolition of two commercial buildings and construction of a 96,510-square-foot hotel with 97 rooms and subterranean parking on 1.39 acres. The project is located at 12432 Valley Boulevard on the southeast corner of Rumford Avenue and Valley Boulevard. Comment Period: 5/11/2018 - 5/31/2018 Public Hearing: N/A	Mitigated Negative Declaration	City of El Monte	Document reviewed - No comments sent

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Retail LAC180529-05 Arts Club Project	The proposed project consists of demolition of a 19,670-square-foot commercial building and construction of a 132,000-square-foot retail building with subterranean parking on 20,241 square feet. The project is located at 8920 West Sunset Boulevard and 1024-1036 North Hilldale Avenue on the southeastern corner of West Sunset Boulevard and North Hilldale Avenue. Reference LAC171003-16, LAC160429-04 and LAC160421-08 Comment Period: N/A Public Hearing: 6/7/2018	Notice of Public Hearing	City of West Hollywood	Document does not require comments
Retail LAC180529-06 Robertson Lane Hotel Project	The proposed project consists of demolition of two existing on-site structures, and construction of a 258,042-square-foot hotel with 241 rooms and subterranean parking on three acres. The project is located on the northwest corner of North Robertson Boulevard and Melrose Avenue. Reference LAC180116-05, LAC170525-01, LAC170323-09 and LAC141210-01 Comment Period: N/A Public Hearing: 6/4/2018	Notice of Public Hearing	City of West Hollywood	Document does not require comments
Retail RVC180508-03 Pavilion Palms Shopping Center (Specific Plan Amendment 2017-0002, Tentative Parcel Map 2017-0003, Site Development Permit 2017-0009, and Environmental Assessment 2017-0006)	The proposed project consists of construction of 125,800 square feet of retail uses including a gasoline service station on 12 acres. The project is located on the northwest corner of Jefferson Street and Avenue 50. Reference RVC180417-07 and RVC180327-04 Comment Period: N/A Public Hearing: N/A	Response to Comments	City of La Quinta	Document reviewed - No comments sent
Retail RVC180521-01 MA18033 (PAR No. 17011)	The proposed project consists of construction of 96,524 square feet of retail uses including a gas station with a 5,250-square-foot fueling canopy on 16.22 acres. The project is located on the northeast corner of Woodbridge Lane and Rutile Street. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/spma18033-052918.pdf Comment Period: 5/21/2018 - 6/4/2018 Public Hearing: N/A	Site Plan	City of Jurupa Valley	SCAQMD staff commented on 5/29/2018

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<i>Retail</i> RVC180522-01 PP2018-0003	The proposed project consists of construction of a hotel with 101 rooms and 23,700 square feet of retail uses including a gasoline service station with 10 fueling pumps on 7.3 acres. The project is located on the northwest corner of Temescal Canyon Road and Dos Lagos Drive. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/sppp20180003-052918.pdf Comment Period: N/A Public Hearing: 5/31/2018	Site Plan	City of Corona	SCAQMD staff commented on 5/29/2018
<i>Retail</i> SBC180501-05 Candlewood Suites Extended Stay Hotel (Conditional Use Permit 17-150)	The proposed project consists of construction of a hotel with 88 rooms on a 1.15-acre portion of 2.4 acres. The project is located near the northwest corner of Richardson Street and Redlands Boulevard. Reference SBC180412-01 Comment Period: N/A Public Hearing: N/A	Response to Comments	City of Loma Linda	Document reviewed - No comments sent
<i>Retail</i> SBC180508-04 Archibald Oil - General Plan Amendment DRC2015-00683, Zoning Map Amendment DRC2015-00684, Design Review DRC2015-00682, Conditional Use Permit DRC2015- 00681, Variance DRC2016-00831, and Minor Exception DRC2017-00879	The proposed project consists of construction of a 968-square-foot car wash, and reuse of a 1,728-square-foot service building and a 1,481-square-foot canopy with four fueling pumps on 1.22 acres. The project is located on the northeast corner of Archibald Avenue and Arrow Route. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/mndarchibaldoil-052918.pdf Comment Period: 5/3/2018 - 6/13/2018 Public Hearing: 6/13/2018	Mitigated Negative Declaration	City of Rancho Cucamonga	SCAQMD staff commented on 5/29/2018
<i>General Land Use (residential, etc.)</i> LAC180501-07 668 S. Alameda Street Project (ENV- 2016-3576-EIR)	The proposed project consists of demolition of four buildings totaling 131,350 square feet, and construction of a 577,301-square-foot building with 475 residential units and subterranean parking on 3.75 acres. The project is located on the southeast corner of South Alameda Street and Industrial Street in the community of Central City North. Reference LAC180501-08, LAC180406-01, LAC171003-15 and LAC161202-01 Comment Period: N/A Public Hearing: 5/22/2018	Final Environmental Impact Report	City of Los Angeles	Document reviewed - No comments sent

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General Land Use (residential, etc.) LAC180508-01 Van Nuys Plaza (ENV-2016-2945: 6569-6581 N. Van Nuys Blvd. & 14506- 14534 W. Kittridge St.)	The proposed project consists of demolition of three buildings and construction of a 157,100-square-foot building with 174 residential units and subterranean parking on 1.29 acres. The project is located on the southwest corner of Kittridge Street and Van Nuys Boulevard in the community of Van Nuys-Sherman Oaks. Reference LAC180329-11 Comment Period: N/A Public Hearing: 5/23/2018	Notice of Public Hearing	City of Los Angeles	Document does not require comments
General Land Use (residential, etc.) LAC180510-01 ENV-2017-2513-MND: 945 W. 8th Street Project	The proposed project consists of construction of a 791,843-square-foot building with 781 residential units, 84,700 square feet of open space, and subterranean parking on a 1.29-acre portion of 7.7 acres. The project is located on the northwest corner of Figueroa Street and 8th Street in the community of Central City. Reference LAC171013-01 and LAC171003-18 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/mnd945w8thstreet-060518.pdf Comment Period: 5/10/2018 - 6/11/2018 Public Hearing: N/A	Mitigated Negative Declaration	City of Los Angeles	SCAQMD staff commented on 6/5/2018
General Land Use (residential, etc.) LAC180510-02 Station Square South Specific Plan (TPM78225, CUP2018-0008, SP2018-0001, MCA2018-0001, and GPC2018-0001)	The proposed project consists of demolition of three existing buildings totaling 64,152 square feet and construction of two buildings totaling 287,329 square feet with 296 residential units on 3.79 acres. The project is located at 205 and 225 West Duarte Road, 1725 Peck Road, and 1726 South Magnolia Avenue near the northeast corner of South Magnolia Avenue and West Duarte Road. Comment Period: 5/14/2018 - 6/13/2018 Public Hearing: 6/13/2018	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Monrovia	Document reviewed - No comments sent
General Land Use (residential, etc.) LAC180518-04 520 Mateo (ENV-2016-1795-EIR)	The proposed project consists of demolition of a 80,736-square-foot warehouse and construction of a 584,760-square-foot building with 600 residential/work units on 2.24 acres. The project is located at 520, 524, 528, and 532 South Mateo Street, and 1310 East 4th Place on the southeast corner of Mateo Street and 4th Place in the community of Central City North. Reference LAC180501-10, LAC180424-04, LAC180413-02, LAC180323-01, LAC171222-06 and LAC161118-02 Comment Period: N/A Public Hearing: 6/14/2018	Notice of Public Hearing	City of Los Angeles	Document does not require comments

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General Land Use (residential, etc.) LAC180522-13 1045 Olive Project (ENV-2016-4630-EIR)	This document provides information that the proposed project is environmental leadership development project and that environmental analysis will be prepared pursuant to Assembly Bill 246 codified in Public Resources Code Division 13, Chapter 6.5, Section 21178. The proposed project consists of demolition of four buildings totaling 34,673 square feet, and construction of a 751,777-square-foot building with 794 residential units, 100,652 square feet of open space, and subterranean parking on 41,603 square feet. The project is located on the northwest corner of West 11st Street and South Olive Street in the community of Central City. Reference LAC171221-03 Comment Period: N/A Public Hearing: N/A	Public Notice	City of Los Angeles	Document reviewed - No comments sent
General Land Use (residential, etc.) LAC180525-02 2143 Violet Street (ENV-2017-438-EIR)	The proposed project consists of demolition of two existing buildings totaling 6,844 square feet, and construction of 302,604 square feet of residential uses with 347 units, 187,374 square feet of office uses, 21,858 square feet of retail uses, and subterranean parking on 2.2 acres. The project is located at 2117-2147 East Violet Street and 2118-2142 East 7th Place near the southeast corner of Santa Fe Avenue and 7th Place in the community of Central City North. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/nop2143violetstreet-060518.pdf Comment Period: 5/25/2018 - 6/25/2018 Public Hearing: 6/14/2018	Notice of Preparation	City of Los Angeles	SCAQMD staff commented on 6/5/2018
General Land Use (residential, etc.) LAC180529-04 Tesoro del Valle (Phases A, B, and C)	The proposed project consists of construction of 820 residential units that were originally approved in 1999 but were not constructed on a 393.6-acre portion of 1,274.6 acres. The project will also include 19.1 acres of open space. The project is located near the southwest corner of North Quail Trail and San Francisquito Canyon Road within the City of Santa Clarita. Reference LAC180306-06, LAC161011-05 and LAC100803-07 Comment Period: N/A Public Hearing: 6/27/2018	Notice of Public Hearing	County of Los Angeles	Document does not require comments
General Land Use (residential, etc.) LAC180530-01 North Business Park Specific Plan	The proposed project consists of construction of 1,017 residential units and 1,631,392 square feet of retail, commercial, business park, and office uses on 128.63 acres. The project is located on the northwest corner of Lindero Canyon Road and Highway 101. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/nopnorthbusinesspark-060518.pdf Comment Period: 5/30/2018 - 6/29/2018 Public Hearing: 6/12/2018	Notice of Preparation	City of Westlake Village	SCAQMD staff commented on 6/5/2018

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<i>General Land Use (residential, etc.)</i> ORC180501-01 Page & Thomas Residential Project	The proposed project consists of construction of 54 residential units totaling 54,000 square feet on 2.33 acres. The project is located at 8281 Page Street on the northeast corner of Page Street and Thomas Street. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/mndpagethomas-051518.pdf Comment Period: 4/27/2018 - 5/17/2018 Public Hearing: N/A	Mitigated Negative Declaration	City of Buena Park	SCAQMD staff commented on 5/15/2018
<i>General Land Use (residential, etc.)</i> ORC180508-02 Town & Country Apartments and Townhomes (MND 1855-17, TTM 0045-17, MSP 0906-17, DR 4914-17, AA 0253-17)	The proposed project consists of demolition of seven commercial buildings totaling 197,874 square feet and construction of two buildings with 727 residential units totaling 1,264,693 square feet on 12.13 acres. The project is located at 702-1078 West Town and Country Road on the southeast corner of Town and Country Road and Lawson Way. Reference ORC180321-01 Comment Period: N/A Public Hearing: 5/21/2018	Response to Comments	City of Orange	Document reviewed - No comments sent
<i>General Land Use (residential, etc.)</i> ORC180510-03 Town & Country Apartments and Townhomes (MND 1855-17, TTM 0045-17, MSP 0906-17, DR 4914-17, AA 0253-17)	The proposed project consists of demolition of seven commercial buildings totaling 197,874 square feet and construction of two buildings with 727 residential units totaling 1,264,693 square feet on 12.13 acres. The project is located at 702-1078 West Town and Country Road on the southeast corner of Town and Country Road and Lawson Way. Reference ORC180508-02 and ORC180321-01 Comment Period: N/A Public Hearing: 5/21/2018	Notice of Public Hearing	City of Orange	Document does not require comments
<i>General Land Use (residential, etc.)</i> ORC180522-09 Lakeview Senior Living	The proposed project consists of construction of a 126,000-square-foot senior living facility with 250 beds on 4.99 acres. The project is located on the southeast corner of Lakeview Avenue and Mariposa Avenue. Reference ORC170505-06 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/dseirlakeviewseniorliving-060518.pdf Comment Period: 5/18/2018 - 6/2/2017 Public Hearing: N/A	Draft Subsequent Environmental Impact Report	City of Yorba Linda	SCAQMD staff commented on 6/5/2018

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<i>General Land Use (residential, etc.)</i> ORC180524-04 Killefer Square Project (MND No. 1844-15)	The proposed project consists of demolition of existing structures and conversion of a 30,010-square-foot building from school to 24 residential units on 1.7 acres. The project is located at 541 North Lemon Street near the northwest corner of Walnut Avenue and North Olive Street. Reference ORC180320-04 Comment Period: N/A Public Hearing: N/A	Response to Comments	City of Orange	Document reviewed - No comments sent
<i>General Land Use (residential, etc.)</i> ORC180529-02 Killefer Square Project (MND No. 1844-15)	The proposed project consists of demolition of existing structures and conversion of a 30,010-square-foot building from school to 24 residential units on 1.7 acres. The project is located at 541 North Lemon Street near the northwest corner of Walnut Avenue and North Olive Street. Reference ORC180524-04 and ORC180320-04 Comment Period: N/A Public Hearing: 6/4/2018	Notice of Public Hearing	City of Orange	Document does not require comments
<i>General Land Use (residential, etc.)</i> RVC180523-04 Ivey Palms Specific Plan (GPA01133, CZ07893, SP00392, and TR37434)	The proposed project consists of construction of 1,500 residential units, a 2.3-acre electrical substation, a 14.5-acre elementary school, 378,970 square feet of commercial and retail uses, and 33.1 acres of open space on 214.7 acres. The project is located near the southeast corner of Varner Road and Ramon Road in the community of Western Coachella Valley. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/nopiveypalms-060518.pdf Comment Period: 5/9/2018 - 6/22/2018 Public Hearing: 6/18/2018	Notice of Preparation	County of Riverside	SCAQMD staff commented on 6/5/2018
<i>General Land Use (residential, etc.)</i> RVC180524-01 Mission Inn Townhomes	The proposed project consists of construction of 13 residential units on 0.64 acres. The project is located at 4019 Mission Inn Avenue on the northwest corner of Chestnut Street and Mission Inn Avenue. Comment Period: 5/24/2018 - 6/13/2018 Public Hearing: 6/28/2018	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Riverside	Document reviewed - No comments sent

- 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
May 01, 2018 to May 31, 2018**

SCAQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<p><i>General Land Use (residential, etc.)</i></p> <p>RVC180525-01 Nichols Ranch Specific Plan (Planning Application No. 2017-29 and Specific Plan No. 2018-01)</p>	<p>The proposed project consists of construction of 168 residential units, 14.5 acres of commercial and retail uses including a hotel with 130 rooms, 5.5 acres of drainage basin, 6.5 acres of floodway, 5.3 acres of roadways, a gas station with 16 fueling pumps, and 9.6 acres of open space on 72.5 acres. The project is located on the southwest corner of Nichols Road and El Toro Road.</p> <p>http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/nopnicholsranch-060518.pdf</p> <p style="text-align: center;">Comment Period: 5/24/2018 - 6/24/2018 Public Hearing: 6/14/2018</p>	<p>Notice of Preparation</p>	<p>City of Lake Elsinore</p>	<p>SCAQMD staff commented on 6/5/2018</p>
<p><i>General Land Use (residential, etc.)</i></p> <p>SBC180509-03 Special Planning Area "D" Specific Plan and Phase Three Concept Area Development Project</p>	<p>The proposed project consists of construction of 481 residential units, 7.1 acres of commercial and office uses, and 26.5 acres of open space on 103 acres. The project is located near the southwest corner of Redlands Boulevard and California Street. Reference SBC180406-05 and SBC180227-02</p> <p style="text-align: center;">Comment Period: N/A Public Hearing: 6/12/2018</p>	<p>Notice of Public Hearing</p>	<p>City of Loma Linda</p>	<p>Document does not require comments</p>
<p><i>Plans and Regulations</i></p> <p>LAC180508-07 Earth Friendly Management Policy</p>	<p>The proposed project consists of development of citywide strategies for pest management, monitoring, and treatment methods that emphasize avoidance of pesticides and chemical applications.</p> <p style="text-align: center;">Comment Period: 5/4/2018 - 6/4/2018 Public Hearing: N/A</p>	<p>Mitigated Negative Declaration</p>	<p>City of Malibu</p>	<p>Document reviewed - No comments sent</p>
<p><i>Plans and Regulations</i></p> <p>LAC180508-08 General Plan and Zone Text Amendment - Uses in the Corporate Office Zone</p>	<p>The proposed project consists of administrative amendments to City General Plan Land Use Element, Municipal Code, and permitted uses to allow office worker-oriented services and uses on 194 acres. The project is located on the northeast corner of El Segundo Boulevard and Sepulveda Boulevard.</p> <p style="text-align: center;">Comment Period: 5/1/2018 - 5/24/2018 Public Hearing: N/A</p>	<p>Notice of Intent to Adopt a Negative Declaration</p>	<p>City of El Segundo</p>	<p>Document reviewed - No comments sent</p>

- 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
May 01, 2018 to May 31, 2018**

<u>SCAQMD LOG-IN NUMBER</u> PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<i>Plans and Regulations</i> ORC180522-14 Code Amendment CO-18-02	The proposed project consists of amendment to City Municipal Code Chapter V, Article 2.5 of Title 13 to increase the minimum open space, setback, lot size, and parking requirements. Comment Period: N/A Public Hearing: 5/31/2018	Notice of Public Hearing	City of Costa Mesa	Document does not require comments
<i>Plans and Regulations</i> ORC180522-15 Code Amendment CO-18-03 - Small Cell Telecommunication Facility Design Guidelines	The proposed project consists of amendment to City Municipal Code Chapter 1, Article 4 of Title 19 to include design guidelines for wireless telecommunication facilities. Comment Period: N/A Public Hearing: 5/31/2018	Notice of Public Hearing	City of Costa Mesa	Document does not require comments
<i>Plans and Regulations</i> ORC180529-03 Zoning Ordinance Amendment 2018-0794 and Local Coastal Program Amendment 2018-0795	The proposed project consists of amendments to City Municipal Code Chapter 25.05.070 regarding the process and procedures for appeals. Reference ORC180508-09 Comment Period: N/A Public Hearing: 6/12/2018	Notice of Public Hearing	City of Laguna Beach	Document does not require comments
<i>Plans and Regulations</i> ORC180529-09 2015-2035 General Plan (General Plan Amendment GP-18-01)	The proposed project consists of revisions to citywide Conceptual Bicycle Master Plan, Roadway Typical Cross Section, and General Plan Circulation Element. The project would also include adoption of Active Transportation Plan. Reference ORC180504-01, ORC160609-13, ORC160603-03, ORC160415-05 and ORC160311-06 Comment Period: N/A Public Hearing: 6/5/2018	Notice of Public Hearing	City of Costa Mesa	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
May 01, 2018 to May 31, 2018**

<u>SCAQMD LOG-IN NUMBER</u> PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<p><i>Plans and Regulations</i> SBC180502-02 Chino School House Museum (General Plan Amendment PL18-0002, Zone Change PL18-0003)</p>	<p>The proposed project consists of request to change land use designation from Residential to Recreation and Open Space for a 20,448-square-foot property. The project is located at 5493 B Street on the southeast corner of 11th Street and B Street.</p> <p style="text-align: right;">Public Hearing: 5/21/2018</p> <p style="text-align: center;">Comment Period: N/A</p>	Notice of Public Hearing	City of Chino	Document does not require comments
<p><i>Plans and Regulations</i> SBC180515-01 Chino School House Museum (General Plan Amendment PL18-0002, Zone Change PL18-0003)</p>	<p>The proposed project consists of request to change land use designation from Residential to Recreation and Open Space for a 20,448-square-foot property. The project is located at 5493 B Street on the southeast corner of 11th Street and B Street. Reference SBC180502-02</p> <p style="text-align: right;">Public Hearing: 6/5/2018</p> <p style="text-align: center;">Comment Period: 5/16/2018 - 6/5/2018</p>	Negative Declaration	City of Chino	Document reviewed - No comments sent

- 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 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
Warehouse & Distribution Centers SBC180404-02 Seefried Valley and Catawba Warehouse Project	The proposed project consists of construction of a 376,910-square-foot warehouse on 17.6 acres. The project is located on the southwest corner of Valley Boulevard and Catawba Avenue. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/nopseefriedvalley-050118.pdf Comment Period: 4/4/2018 - 5/4/2018 Public Hearing: 4/18/2018	Notice of Preparation	City of Fontana	SCAQMD staff commented on 5/1/2018
Industrial and Commercial LAC180410-06 The Park at Live Oak Specific Plan	The proposed project consists of construction of 1,550,000 square feet of industrial park, logistics, and commercial retail center uses on 78.3 acres. The project is located on the northeast corner of Arrow Highway and Live Oak Avenue. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/noptheparkatliveoak-050118.pdf Comment Period: 4/2/2018 - 5/2/2018 Public Hearing: 4/26/2018	Notice of Preparation	City of Irwindale	SCAQMD staff commented on 5/1/2018
Industrial and Commercial RVC180410-14 All American's Surface Mine Permit (SMP2017-0101)	The proposed project consists of extension of permit termination from December 31, 2021 to December 31, 2121, expansion of the mining boundary from 298 to 321 acres, increase in extraction of mineral reserves from 112 to 177 million tons, increase in mining depth from 500 to 400 feet above mean sea level, and relocation of processing plant. The project is located at 1776 All American Way on the southwest corner of All American Way and Copper Road. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/spsmp20170101-050118.pdf Comment Period: 4/4/2018 - 5/4/2018 Public Hearing: N/A	Site Plan	City of Corona	SCAQMD staff commented on 5/1/2018
Industrial and Commercial RVC180424-05 So Cal Gas NGV Refueling Station (CUP 2018-093)	The proposed project consists of installation of two compressed natural gas compressors and supporting equipment with 45 fueling hoses. The project is located at 25200 Trumble Road on the northeast corner of Trumble Road and Blue Diamond Lane. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/spsocalgasngv-050118.pdf Comment Period: 4/18/2018 - 5/11/2018 Public Hearing: N/A	Site Plan	City of Menifee	SCAQMD staff commented on 5/1/2018
Waste and Water-related LAC180323-03 Berths 167-169 Shell Marine Oil Terminal Wharf Improvements Project	The proposed project consists of seismic and ground improvements, piping replacement and foundation support improvements, and topside equipment replacement on 12 acres. The project is located near the southwest corner of Fries Avenue and La Paloma in the Port of Los Angeles. Reference LAC160415-02 and LAC150630-17 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/deirberths167169shell-050818.pdf Comment Period: 3/27/2018 - 5/10/2018 Public Hearing: 4/11/2018	Draft Environmental Impact Report	Port of Los Angeles	SCAQMD staff commented on 5/8/2018

*Sorted by Comment Status, followed by Land Use, then County, then date received.

- 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**

<u>SCAQMD LOG-IN NUMBER</u> PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<i>Waste and Water-related</i> LAC180327-10 West Basin Ocean Water Desalination Project Building	The proposed project consists of construction of ocean water desalination facility with a capacity ranging from 20 to 60 million gallons per day of potable drinking water. The project would also include construction of ocean water intake and concentrate discharge infrastructure and water conveyance system. The project is located at 301 Vista Del Mar on the northeast corner of Ocean Drive and 45th Street within the City of El Segundo. Reference LAC150901-03 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/deirwestbasinocean-051518.pdf Comment Period: 3/27/2018 - 5/25/2018 Public Hearing: 4/25/2018	Draft Environmental Impact Report	West Basin Municipal Water District	SCAQMD staff commented on 5/15/2018
<i>Waste and Water-related</i> LAC180417-06 Former Palace Plating Site, Los Angeles	The proposed project consists of development of interim cleanup plan to treat and remove volatile organic compounds and metals in soil on 0.3 acres. The project is located at 710 East 29th Street near the southeast corner of South San Pedro Street and East 29th Street in the community of Southeast Los Angeles. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/dirawformerpalaceplating-051018.pdf Comment Period: 4/13/2018 - 5/14/2018 Public Hearing: N/A	Draft Interim Removal Action Work Plan	Department of Toxic Substances Control	SCAQMD staff commented on 5/10/2018
<i>Waste and Water-related</i> LAC180417-09 East Los Angeles Sustainable Median Stormwater Capture Project	The proposed project consists of construction of low impact development features, including bioswales, pipelines, diversion structures, walkways, recreational and public use areas, and roadway improvements. The project will also include treatment of 232 acre-feet of stormwater from a 3,000-acre tributary area. The project is located on the northwest corner of Garfield Avenue and Southside Drive within the community of East Los Angeles Reference LAC150121-03 and LAC140902-11 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/addendumeastlosangeles-050118.pdf Comment Period: 4/13/2018 - 5/13/2018 Public Hearing: N/A	Notice of Availability of a Addendum to Final Program Environmental Impact Report	Los Angeles County Flood Control District	SCAQMD staff commented on 5/1/2018
<i>Waste and Water-related</i> ORC180420-05 North Basin Remedial Investigation Additional Monitoring Well Installation Project	The proposed project consists of construction of eight monitoring wells of 10 inches in diameter and up to 450 feet in depth at five locations within the cities of Anaheim and Fullerton. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/mndnorthbasinremedial-052218.pdf Comment Period: 4/24/2018 - 5/23/2018 Public Hearing: 6/6/2018	Mitigated Negative Declaration	Orange County Water District	SCAQMD staff commented on 5/22/2018

- 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**

<u>SCAQMD LOG-IN NUMBER</u> PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<i>Retail</i> LAC180412-06 ENV-2016-3786: 20101 W. Ventura Blvd.	The proposed project consists of demolition of a 768-square-foot gas station and construction of a 4,985-square-foot restaurant on 0.9 acres. The project is located on the northwest corner of Winnetka Avenue and Ventura Boulevard in the community of Canoga Park-Winnetka-Woodland Hills-West Hills. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/mnd20101wventura-050218.pdf Comment Period: 4/12/2018 - 5/2/2018 Public Hearing: N/A	Mitigated Negative Declaration	City of Los Angeles	SCAQMD staff commented on 5/2/2018
<i>Retail</i> RVC180406-03 Lewis Retail and Civic Center (PLN17-20015) and Al's Corner (PLN17-20029)	The proposed project consists of construction of a gasoline station with 24 fueling pumps, 19,500 square feet of retail uses, a 10,000-square-foot medical office, a 74,800-square-foot hotel with 130 rooms, and 65,000 square feet of civic uses on 23 acres. The project would also include installation of a 36-inch storm drain. The project is located at 7270 Hamner Avenue on the southeast corner of Hamner Avenue and Mississippi Drive. Reference RVC180126-03 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/deirlewisretailandcivic-051518.pdf Comment Period: 4/6/2018 - 5/21/2018 Public Hearing: N/A	Draft Environmental Impact Report	City of Eastvale	SCAQMD staff commented on 5/15/2018
<i>General Land Use (residential, etc.)</i> LAC180405-01 3003 Runyon Canyon (ENV-2016-4180-EIR)	The proposed project consists of construction of a 11,284-square-foot residential unit on 197,435 square feet. The project is located on the northwest corner of Runyon Canyon Road Hiking Path and Runyon Canyon Road in the community of Hollywood. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/nop3003runyoncanyon-050118.pdf Comment Period: 4/3/2018 - 5/3/2018 Public Hearing: 4/17/2018	Notice of Preparation	City of Los Angeles	SCAQMD staff commented on 5/1/2018
<i>General Land Use (residential, etc.)</i> LAC180412-05 ENV-2016-4711: 1000-1034 S. Hill St. & 220-226 W. Olympic Blvd.	The proposed project consists of demolition of existing parking lot and construction of a 658,021-square-foot building with 700 residential units and subterranean parking on 1.16 acres. The project will also include 86,976 square feet of open space. The project is located on the southwest corner of Olympic Boulevard and Hill Street in the community of Central City. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/mnd1034hillst-050218.pdf Comment Period: 4/12/2018 - 5/2/2018 Public Hearing: N/A	Mitigated Negative Declaration	City of Los Angeles	SCAQMD staff commented on 5/2/2018
<i>General Land Use (residential, etc.)</i> LAC180426-04 Fig and 8th (ENV-2016-1951-EIR)	The proposed project consists of demolition of existing parking lot, and construction of a 481,753-square-foot building with 438 residential units and subterranean parking on 1.16 acres. The project is located at 732-756 South Figueroa Street and 829 West 8th Street on the northeast corner of Figueroa Street and 8th Street in the community of Central City. Reference LAC161101-04 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/deirfigand8th-051518.pdf Comment Period: 4/26/2018 - 6/11/2018 Public Hearing: N/A	Draft Environmental Impact Report	City of Los Angeles	SCAQMD staff commented on 5/15/2018

- Project has potential environmental justice concerns due to the nature and/or location of the project.

**ATTACHMENT C
ACTIVE SCAQMD LEAD AGENCY PROJECTS
THROUGH MAY 31, 2018**

PROJECT DESCRIPTION	PROONENT	TYPE OF DOCUMENT	STATUS	CONSULTANT
<p>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.</p>	<p>Phillips 66 (formerly ConocoPhillips), Los Angeles Refinery</p>	<p>Environmental Impact Report (EIR)</p>	<p>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 the consultant has prepared responses to comments which are undergoing SCAQMD review.</p>	<p>Environmental Audit, Inc.</p>
<p>Quemetco is proposing to modify existing SCAQMD permits to allow the facility to recycle more batteries and to eliminate the existing daily idle time of the furnaces. The proposed project will increase the rotary feed drying furnace feed rate limit from 600 to 750 tons per day and increase the amount of total coke material allowed to be processed. In addition, the project will allow the use of petroleum coke in lieu of or in addition to calcined coke, and remove one existing emergency diesel-fueled internal combustion engine (ICE) and install two new emergency natural gas-fueled ICEs.</p>	<p>Quemetco</p>	<p>Environmental Impact Report (EIR)</p>	<p>A Notice of Preparation/Initial Study (NOP/IS) has been prepared by the consultant and SCAQMD staff has provided comments. The consultant has provided a revised NOP/IS which is undergoing SCAQMD review before public release.</p>	<p>Trinity Consultants</p>

**ATTACHMENT C
ACTIVE SCAQMD LEAD AGENCY PROJECTS
THROUGH MAY 31, 2018**

PROJECT DESCRIPTION	PROPONENT	TYPE OF DOCUMENT	STATUS	CONSULTANT
<p>Southern California Edison (SCE) is proposing to modify the air pollution control system for the Barre Peaker unit to repair current and prevent future water damage by: 1) decreasing the water-injection rate into the turbine’s combustor; 2) replacing the oxidation catalyst and increasing the overall area of catalyst beds in the selective catalytic reduction (SCR) unit; 3) replacing the ammonia injection grid to improve the deliverability of ammonia to the catalyst; and, 4) increasing the concentration of the aqueous ammonia that is delivered to the facility, stored on-site, and injected into the SCR unit from 19% to 29%. In addition, SCE is proposing to revise its SCAQMD Title V Operating Permit to allow the turbine to generate power over its full operating range, from less than one megawatt (MW) to full load (e.g., 45 MW net), while continuing to meet the emission limits in the current permit.</p>	<p>Southern California Edison</p>	<p>Addendum to the April 2007 Final Mitigated Negative Declaration for the Southern California Edison Barre Peaker Project in Stanton</p>	<p>A draft Addendum has been prepared by the consultant and SCAQMD staff has provided comments. The consultant has revised the Addendum which is undergoing SCAQMD staff review.</p>	<p>Yorke Engineering, LLC</p>
<p>Southern California Edison (SCE) is proposing to modify the air pollution control system for the Mira Loma Peaker unit to repair current and prevent future water damage by: 1) decreasing the water-injection rate into the turbine’s combustor; 2) replacing the oxidation catalyst and increasing the overall area of catalyst beds in the Selective Catalytic Reduction (SCR) unit; 3) replacing the ammonia injection grid to improve the deliverability of ammonia to the catalyst; and, 4) increasing the concentration of the aqueous ammonia that is delivered to the facility, stored on-site, and injected into the SCR unit from 19% to 29%. In addition, SCE is proposing to revise its SCAQMD Title V Operating Permit to allow the turbine to generate power over its full operating range, from less than one megawatt (MW) to full load (e.g., 45 MW net), while continuing to meet the emission limits in the current permit.</p>	<p>Southern California Edison</p>	<p>Addendum to the April 2007 Final Mitigated Negative Declaration for the Southern California Edison Mira Loma Peaker Project in Ontario</p>	<p>A draft Addendum has been prepared by the consultant and SCAQMD staff has provided comments. The consultant has revised the Addendum which is undergoing SCAQMD staff review.</p>	<p>Yorke Engineering, LLC</p>

BOARD MEETING DATE: July 6, 2018

AGENDA NO. 15

REPORT: Rule and Control Measure Forecast

SYNOPSIS: This report highlights SCAQMD rulemaking activities and public workshops potentially scheduled for 2018.

COMMITTEE: No Committee Review

RECOMMENDED ACTION:
Receive and file.

Wayne Natri
Executive Officer

PMF:SN:AF:EG

2018 MASTER CALENDAR

The table that follows summarizes changes to the schedule since last month's Rule and Control Measure Forecast Report. A number of rule projects have been moved to a later 2018 public hearing date or to 2019. Over the past six months, decisions to delay certain rule projects at committee meetings, the set hearing, or public hearing have impacted the rulemaking calendar. These delays not only affect specific rule projects, but other rule projects that are handled by the same rule team. Furthermore, the complexity of the RECLAIM transition has led to delays to allow staff additional time to work with stakeholders. The hiring effort for rule development teams will help to minimize delaying rule projects in the future. However, it takes several months to train staff on the procedures of rule writing before they are fully productive.

Symbols have been added to indicate the following:

- * This rulemaking is a potentially significant hearing.*
- + This rulemaking will reduce criteria air contaminants and assist toward attainment of ambient air quality standards.*
- # This rulemaking is part of the transition of RECLAIM to a command-and-control regulatory structure.*

Reg. IX Reg. X	Standards of Performance for New Stationary Sources (NSPS) National Emission Standards for Hazardous Air Pollutants (NESHAPS)
Proposed Amended Regulations IX and X are moving from November 2018 to 2019 to allow additional time to assess implications of recent changes to NSPS and NESHAPS.	
1109.1*+##	Refinery Equipment
Proposed Rule 1109.1 is being moved from December 2018 to 2019 to provide additional time for staff to receive survey information, analyze data, develop BARCT limits, work with stakeholders, and complete CEQA.	
1110.2*+## 1100*+##	Emissions from Stationary Internal Combustion Engines Implementation Schedule for NOx Facilities
Proposed Amended Rule 1110.2 and Proposed Rule 1100 is being moved from September 2018 to 2019 to provide additional time for staff to analyze data and work with stakeholders.	
1118.1*+##	Control of Emissions from Non-Refinery Flares
Proposed Rule 1118.1 is being moved from September 2018 to November 2018 to allow staff to explore additional implementation approaches based on comments from stakeholders.	
1134*+## 1100*+##	Emissions of Oxides of Nitrogen from Stationary Gas Turbines Implementation Schedule for NOx Facilities
Proposed Amended Rule 1134 and Proposed Rule 1100 are being moved from October 2018 to 2019 to provide additional time to complete the CEQA process.	
1135*+## 1100*+##	Emissions of Oxides of Nitrogen from Electric Power Generating Facilities Implementation Schedule for NOx Facilities
Proposed Amended Rule 1135 and Proposed Rule 1100 are being moved forward to October 2018 from November 2018.	
1146 1146.1 1146.2 1100	Emissions of Oxides of Nitrogen from Industrial, Institutional and Commercial Boilers, Steam Generators, and Process Heaters Emissions of Oxides of Nitrogen from Small Industrial, Institutional and Commercial Boilers, Steam Generators, and Process Heaters Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters Implementation Schedule for NOx Facilities
Proposed Amended Rules 1146, 1146.1, and 1146.2 and Proposed Rule 1100 are moving from November 2018 to December 2018 to allow staff to conduct an assessment of BARCT technologies and complete the CEQA analysis.	
Reg. XIII	New Source Review
Proposed Amended Regulation XIII is moving from November 2018 to 2019 to allow additional time to evaluate different options with stakeholders and work with U.S. EPA.	

1407*	Control of Emissions of Arsenic, Cadmium and Nickel from Non-Chromium Alloy Melting Operations
Proposed Amended Rule 1407 is being moved from September 2018 to December 2018. Based on stakeholder comments, Proposed Rule 1407 was bifurcated from Proposed Rule 1407.1. The focus of Proposed Rule 1407 will be on non-chromium metal melting operations.	
1407.1*	Control of Emissions of Toxic Air Contaminants from Chromium Alloy Melting Operations
Proposed Rule 1407.1 is being moved from September 2018 to November 2018. Proposed Rule 1407.1 was bifurcated from the rule development process for Proposed Amended Rule 1407 based on stakeholder comments.	
1435*	Control of Emissions from Metal Heat Treating Processes
Proposed Rule 1435 is moving from November 2018 to 2019 to allow completion of additional emissions testing before proceeding with rulemaking.	
1480*	Air Toxic Metals Monitoring
Proposed Rule 1480 is being moved from September 2018 to December 2018 to allow staff additional time to develop an implementation approach and work with stakeholders.	
Reg. XVI	Mobile Source Offset Programs
Proposed Amended Regulation XVI is moving from October 2018 to 2019 to allow additional time to work with stakeholders.	
2001*^{+#} 2002^{#*}	RECLAIM – Applicability RECLAIM - Allocations for Oxides of Nitrogen (NO_x) and Oxides of Sulfur (SO_x)
Proposed Amended Rules 2001 and 2002 are being moved from September 2018 to October 2018 to allow staff additional time to work with stakeholders.	
2202	On-Road Motor Vehicle Mitigation Options
Proposed Amended Rule 2202 is moving from December 2018 to 2019 to allow additional time to work with stakeholders.	

2018 MASTER CALENDAR

September	Title and Description	Type of Rulemaking
1469*	<p>Hexavalent Chromium Emissions from Chromium Electroplating and Chromic Acid Anodizing Operations</p> <p>Proposed Amended Rule 1469 will further reduce hexavalent chromium emissions by establishing new requirements for certain hexavalent chromium tanks that are currently not regulated, further address potential fugitive emissions from hexavalent chromium electroplating and chromic acid anodizing operations, and add a process to re-certify chemical fume suppressants.</p> <p><i>Jillian Wong 909.396.3176 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Toxics
October		
2001*+## 2002*##	<p>RECLAIM – Applicability</p> <p>RECLAIM - Allocations for Oxides of Nitrogen (NO_x) and Oxides of Sulfur (SO_x)</p> <p>Proposed Amended Rules 2001 and 2002 will incorporate provisions for facilities that elect to opt-out of RECLAIM and include provisions for facilities that exit RECLAIM through use of a compliance plan.</p> <p><i>Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	AQMP
1135*+##	<p>Emissions of Oxides of Nitrogen from Electric Power Generating Facilities</p> <p>Proposed Amended Rule 1135 will incorporate requirements for electric power generating facilities that are to transition from NO_x RECLAIM to command-and-control.</p> <p><i>Michael Morris 909.396.3282 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	AQMP
1100*+##	<p>Implementation Schedule for NO_x Facilities</p> <p>Rule 1100 will establish the implementation schedule for specific NO_x RECLAIM facilities that are transitioning to command-and-control.</p> <p><i>Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	
November		
1407.1*	<p>Control of Emissions of Toxic Air Contaminants from Chromium Alloy Melting Operations</p> <p>Proposed Rule 1407.1 will require emissions testing and submittal of data to better quantify toxic air contaminant emissions.</p> <p><i>Michael Morris 909.396.3282 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Toxics
1118.1*+##	<p>Control of Emissions from Non-Refinery Flares</p> <p>Proposed Rule 1118.1 will seek to reduce emissions from flaring at non-refinery facilities, including alternate uses of gases. The proposed rule will require use of flares that meet a specific emission standard at sources such as landfills, wastewater treatment plants, and oil and gas production facilities.</p> <p><i>Michael Krause 909.396.2706 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	AQMP

2018 MASTER CALENDAR

December	Title and Description	Type of Rulemaking
1146	Emissions of Oxides of Nitrogen from Industrial, Institutional and Commercial Boilers, Steam Generators, and Process Heaters	AQMP
1146.1	Emissions of Oxides of Nitrogen from Small Industrial, Institutional and Commercial Boilers, Steam Generators, and Process Heaters	
1146.2*+ #	Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters Amendments to Rules 1146, 1146.1, and 1146.2 will incorporate requirements for facilities that are in RECLAIM that are required to meet BARCT emission control levels.	
1100*+ #	Implementation Schedule for NOx Facilities Rule 1100 will establish the implementation schedule for specific NOx RECLAIM facilities that are transitioning to command-and-control. <i>Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i>	
1403	Asbestos Emissions from Demolition/Renovation Activities Amendments to Rule 1403 will include specific requirements when conducting asbestos-emitting demolition/renovation activities at schools, daycare centers, and possibly establishments that have sensitive populations. Amendments may include other provisions to improve the implementation of the rule. <i>David De Boer 909.396.2329 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i>	Toxics
1407*	Control of Emissions of Arsenic, Cadmium and Nickel from Non-Chromium Alloy Melting Operations Proposed Rule 1407 will establish additional requirements to minimize toxic air contaminant emissions from metal operations. <i>Michael Morris 909.396.3282 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i>	Toxics
1410*	Hydrogen Fluoride Use at Refineries Proposed Rule 1410 will establish requirements for use of hydrogen fluoride at refineries. <i>Michael Krause 909.396.2706 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i>	Toxics
1480*	Air Toxic Metals Monitoring Proposed Rule 1480 will establish provisions for when ambient monitoring is required and the toxic air contaminants that will be monitored. <i>Jillian Wong 909.396.3176 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i>	Toxics

**RULES MOVED FROM 2018 TO 2019
MASTER CALENDAR**

2019	Title and Description	Type of Rulemaking
Reg. IX Reg. X	<p>Standards of Performance for New Stationary Sources (NSPS) National Emission Standards for Hazardous Air Pollutants (NESHAPS)</p> <p>Amendments to Regulations IX and X are periodically made to incorporate by reference new or amended federal 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.</p> <p><i>Carol Gomez 909.396.3264 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Other
1109.1*+##	<p>Refinery Equipment</p> <p>Proposed Rule 1109.1 will establish requirements for refineries that are transitioning from RECLAIM to command-and-control.</p> <p><i>Michael Krause 909.396.2706 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	AQMP
1110.2*+##	<p>Emissions from Stationary Internal Combustion Engines</p> <p>Rule 1110.2 will be amended to incorporate provisions for facilities that are transitioning from NOx RECLAIM to command-and-control.</p>	AQMP
1100*+##	<p>Implementation Schedule for NOx Facilities</p> <p>Rule 1100 will establish the implementation schedule for specific NOx RECLAIM facilities that are transitioning to command-and-control.</p> <p><i>Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	AQMP
1134*+##	<p>Emissions of Oxides of Nitrogen from Stationary Gas Turbines</p> <p>Proposed Amended Rule 1134 will update the emission standard to incorporate Best Available Retrofit Control Technology and incorporate provisions for facilities that are transitioning from NOx RECLAIM to command-and-control.</p>	AQMP
1100*+##	<p>Implementation Schedule for NOx Facilities</p> <p>Rule 1100 will establish the implementation schedule for specific NOx RECLAIM facilities that are transitioning to command-and-control.</p> <p><i>Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	AQMP
Reg. XIII*+##	<p>New Source Review</p> <p>Amendments to Regulation XIII are needed to address New Source Review provisions for facilities that exit RECLAIM.</p> <p><i>Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Other

**RULES MOVED FROM 2018 TO 2019
MASTER CALENDAR**

2019 (Continued)	Title and Description	Type of Rulemaking
2202	<p>On-Road Motor Vehicle Mitigation Options Proposed amendments to Rule 2202 would enhance emission reductions obtained from the Employee Commute Reduction Program (ECRP) rule option. <i>Carol Gomez 909.396.3264 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Other
1435*	<p>Control of Emissions from Metal Heat Treating Processes Proposed Rule 1435 would establish requirements to reduce hexavalent chromium emissions from heat treating processes. <i>Jillian Wong 909.396.3176 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Toxics
Reg. XVI	<p>Mobile Source Offset Programs Amendments to various Regulation XVI rules will be proposed to provide greater opportunity to reduce mobile source emissions and to obtain credit in the State Implementation Plan for these reductions where possible, including addressing the recent U.S. EPA proposed disapproval of Rule 1610. <i>Zorik Pirveysian 909.396.2431 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Other

**2018 MASTER CALENDAR
2018 To-Be-Determined**

To-Be-Determined	Title and Description	Type of Rulemaking
102	<p>Definition of Terms Staff may propose amendments to Rule 102 to add or revise definitions in order to support amendments to other Regulation XI rules. <i>David De Boer 909.396.2329 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Other
120	<p>Credible Evidence Rule Proposed Rule 120 will allow any credible evidence to be used for the purpose of establishing that a person has violated or is in violation of any plan, order, permit, rule, regulation, or law. <i>Michael Krause 909.396.2706 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Other
113*#	<p>Monitoring, Reporting, and Recordkeeping (MRR) Requirements for NOx and SOx Sources Proposed Rule 113 will establish MRR requirements for facilities exiting RECLAIM and transitioning to a command-and-control regulatory structure. <i>Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Other
218	<p>Continuous Emission Monitoring Amendments to Rule 218 may be needed for facilities exiting RECLAIM and transitioning to a command-and-control regulatory structure. <i>Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Other
218.1	<p>Continuous Emission Monitoring Performance Specifications Amendments to Rule 218.1 may be needed for facilities exiting RECLAIM and transitioning to a command-and-control regulatory structure. <i>Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Other
223 ⁺	<p>Emission Reduction Permits for Large Confined Animal Facilities 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: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	AQMP
224 ⁺	<p>Incentives for Super-Compliant Technologies 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 rule. <i>Zorik Pirveysian 909.396.3421 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Other

2018 MASTER CALENDAR
2018 To-Be-Determined (continued)

To-Be-Determined	Title and Description	Type of Rulemaking
416*	<p>Odors from Kitchen Grease Processing Proposed Rule 416 will reduce ambient 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.</p> <p><i>Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Other
429*+##	<p>Start-Up and Shutdown Exemption Provisions for Oxides of Nitrogen It may be necessary to amend Rule 429 to address start-up/shutdown provisions related to the transition of NOx RECLAIM to a command-and-control regulatory program and if U.S. EPA requires updates to such provisions.</p> <p><i>Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Other
430*	<p>Breakdown Provisions This rule will be amended or replaced to address specific issues raised by U.S. EPA regarding start-ups or shutdowns associated with breakdowns.</p> <p><i>Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	AQMP
1106 1106.1*+	<p>Marine Coating Operations Pleasure Craft Coating Operations Rule 1106.1 is proposed to be rescinded; Rule 1106 would subsume the requirements of Rule 1106.1, revise VOC content limits for several categories in order to align limits with U.S. EPA Control Techniques Guidelines and other California air districts, and add new categories for several categories.</p> <p><i>Michael Krause 909.396.2706 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Other
1107+	<p>Coating of Metal Parts and Products Potential amendments to Rule 1107 would further reduce VOC emissions and improve rule clarity and enforceability.</p> <p><i>Michael Krause 909.396.2706 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	AQMP
1109*+##	<p>Emissions of Oxides of Nitrogen from Boilers and Process Heaters in Petroleum Refineries Amendments to Rule 1109 may be needed to establish BARCT emission limits for refineries that are exiting RECLAIM and subject to command-and-control rules.</p> <p><i>Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	AQMP

2018 MASTER CALENDAR
2018 To-Be-Determined (continued)

To-Be-Determined	Title and Description	Type of Rulemaking
1111.1 ⁺	<p>Reduction of NOx Emissions from Natural Gas Fired Commercial Furnaces Proposed Rule 1111.1 will establish equipment-specific NOx emission limits and other requirements for the operation of commercial space heaters. <i>Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Other
1113 ⁺	<p>Architectural Coatings Pursuant to guidance from the Stationary Source Committee, staff will amend to remove the tBAC exemption and is evaluating the impact from removing pCBtF as a VOC exempt compound. <i>Michael Krause 909.396.2706 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Other
1117* ^{+#}	<p>Glass Melting Furnaces Proposed amendments will control NOx emissions from glass melting furnaces. <i>Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	AQMP
1123* ⁺	<p>Refinery Process Turnarounds Proposed amendments will establish procedures that better quantify emission impacts from start-up, shutdown or turnaround activities. <i>Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	AQMP
1136* ⁺	<p>Wood Products Coatings Amendments may be proposed to existing rule limits and other provisions. <i>David De Boer 909.396.2329 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	AQMP
1450* ⁺	<p>Control of Methylene Chloride Emissions The proposed rule would reduce exposure to methylene chloride from furniture stripping, remove potential regulatory loopholes, achieve emission reductions where possible and cost effective, include reporting requirements, and improve consistency with other SCAQMD VOC rules. <i>David De Boer 909.396.2329 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Toxics
1142*	<p>Marine Tank Vessel Operations Proposed revisions to Rule 1142 would address VOC emissions from marine tank vessel operations and provide clarifications. <i>David De Boer 909.396.2329 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Other
1147.1* ^{+#}	<p>Large Miscellaneous Combustion Rule 1147.1 will include large miscellaneous combustion sources currently at RECLAIM facilities. <i>Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Other

2018 MASTER CALENDAR
2018 To-Be-Determined (continued)

To-Be-Determined	Title and Description	Type of Rulemaking
1147.2*+ [#]	<p>Metal Melting and Heat Treating Furnaces Proposed Rule 1147.2 will reduce NOx emissions from metal melting and heat treating furnaces. <i>Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	AQMP
1147.3*+ [#]	<p>Emission Reductions for Equipment at Aggregate Facilities Proposed Rule 1147.3 will reduce NOx emissions from aggregate operations. <i>Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	AQMP
1148.1 1148.2	<p>Oil and Gas Production Wells Notification and Reporting Requirements for Oil and Gas Wells and Chemical Suppliers 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. <i>Jillian Wong 909.396.3176 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Other
1148.3*	<p>Requirements for Natural Gas Underground Storage Facilities Proposed Rule 1148.3 will establish requirements to address public nuisance and VOC emissions from underground natural gas storage facilities. <i>Jillian Wong 909.396.3176 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Other
1150.1	<p>Control of Gaseous Emissions from Municipal Solid Waste Landfills Proposed amendments will address U.S. EPA revisions to the New Source Performance Standards for Municipal Solid Waste Landfills and Existing Guidelines and Compliance Timelines for Municipal Solid Waste Landfills, as well as CARB GHG requirements. <i>Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Other
1151*+ [#]	<p>Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations Pursuant to guidance from the Stationary Source Committee, staff will amend to remove the tBAC exemption and is evaluating the impact from removing pCBtF as a VOC exempt compound. <i>Michael Krause 909.396.2706 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Other
1153.1*+ [#]	<p>Emissions of Oxides of Nitrogen from Commercial Food Ovens 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: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Other

2018 MASTER CALENDAR
2018 To-Be-Determined (continued)

To-Be-Determined	Title and Description	Type of Rulemaking
1159.1*+##	<p>Nitric Acid Units - Oxides of Nitrogen Proposed Rule 1159.1 will address NO_x emissions from processes using nitric acid and is needed as part of the transition of RECLAIM to command-and-control. <i>David De Boer 909.396.2329 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	AQMP
1173+	<p>Control of Volatile Organic Compound Leaks and Releases from Components at Petroleum Facilities and Chemical Plants Proposed revisions to Rule 1173 are being considered based on recent U.S. EPA regulations and CARB oil and gas regulations. <i>Michael Krause 909.396.2706 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Other
1177+	<p>Liquefied Petroleum Gas Transfer and Dispensing Potential amendments may be proposed to include additional sources of emissions from the dispensing and transfer of LPG. <i>Michael Krause 909.396.2706 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	AQMP
1188+	<p>VOC Reductions from Vacuum Trucks 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. <i>David De Boer 909.396.2329 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	AQMP
1190, 1191, 1192, 1193, 1194, 1195, 1196, & 1186.1*+	<p>Fleet Vehicle Requirements Amendments to fleet rules may be necessary to improve rule implementation. In addition, the current fleet rules may be expanded to achieve additional air quality and air toxic emission reductions. <i>Zorik Pirveysian 909.396.2431 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Other
1304.2*	<p>California Public Utilities Commission Regulated Electrical Local Publicly Owned Electrical Utility Fee for Use of SO_x, PM₁₀ and NO_x Offsets</p>	Other
1304.3*	<p>Local Publicly Owned Electrical Generating Facility Fee for Use of SO_x, PM₁₀ and NO_x Offsets Proposed Rules 1304.2 and 1304.3 would allow new greenfield facilities and additions to existing electricity generating facilities (EGFs) conditional access to SCAQMD internal offset accounts for a fee, for subsequent funding of qualifying improvement projects consistent with the AQMP. <i>Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Other

2018 MASTER CALENDAR
2018 To-Be-Determined (continued)

To-Be-Determined	Title and Description	Type of Rulemaking
1415 1415.1	<p>Reduction of Refrigerant Emissions from Stationary Air Conditioning Systems</p> <p>Reduction of Refrigerant Emissions from Stationary Refrigeration Systems</p> <p>Amendments will align with proposed CARB Refrigerant Management Program and U.S. EPA's Significant New Alternatives Policy Rule provisions relative to prohibitions on specific hydrofluorocarbons (HFCs).</p> <p><i>David De Boer 909.396.2329 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Other
1426*	<p>Emissions from Metal Finishing Operations</p> <p>Proposed amendments to Rule 1426 will establish requirements to reduce nickel, cadmium and other air toxics from plating operations.</p> <p><i>Jillian Wong 909.396.3176 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Toxics
1430	<p>Control of Emissions from Metal Grinding Operations at Metal Forging Facilities</p> <p>Proposed amendments to Rule 1430 may be needed related to reducing emissions from metal forging operations.</p> <p><i>Jillian Wong 909.396.3176 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Toxics
1445*	<p>Control of Toxic Emissions from Laser Arc Cutting</p> <p>Proposed Rule 1445 will establish requirements to reduce toxic metal particulate emissions from laser arc cutting.</p> <p><i>David De Boer 909.396.2329 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Toxics
1469.1*	<p>Spraying Operations Using Coatings Containing Chromium</p> <p>Proposed Amended Rule 1469.1 would establish additional requirements for facilities that are conducting spraying using chromium coatings to further reduce hexavalent chromium emissions.</p> <p><i>Jillian Wong 909.396.3176 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Other
1470*	<p>Requirement for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines at Sensitive Receptors</p> <p>The proposal would address new and existing small (≤ 50 brake horsepower) diesel engines located near sensitive receptors. Staff is also considering amendments to minimize use of stationary diesel back-up engines that may include use of alternative power sources that are less polluting.</p> <p><i>David De Boer 909.396.2329 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Toxics
1902	<p>Transportation Conformity</p> <p>Amendments to Rule 1902 may be necessary to align the rule with current U.S. EPA requirements.</p> <p><i>Ian MacMillan 909.396.3244 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Other

2018 MASTER CALENDAR
2018 To-Be-Determined (continued)

To-Be-Determined	Title and Description	Type of Rulemaking
1905	<p>Pollution Controls for Automotive Tunnel Vents This proposed rule would address emissions from proposed roadway tunnel projects that could have air quality impacts. <i>Ian MacMillan 909.396.3244 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Other
Reg. XVII	<p>Prevention of Significant Deterioration (PSD) Proposed amendments to Regulation XVII will align the SCAQMD's Prevention of Significant Deterioration program with federal requirements. <i>David De Boer 909.396.2329 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Other
Reg. XX*+‡	<p>RECLAIM Amendments to rules within Regulation XX will be needed as facilities transition from RECLAIM to a command-and-control regulatory structure. <i>Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	AQMP
Reg. XXIII	<p>Facility Based Mobile Sources Regulation XXIII would contain rules related to reducing emissions from mobile sources that visit certain types of facilities. Facility types could include commercial airports, marine ports, rail yards, warehouses, and new and development projects. Regulation XXIII may include other sources as identified in the 2016 AQMP. <i>Ian MacMillan 909.396.3244 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	AQMP
Reg. XXV	<p>Intercredit Trading 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 2016 AQMP includes two measures that seek to accelerate early deployment of near-zero and zero emission on-road heavy-duty trucks and off-road equipment, through generation of MSERCs that could be used for purposes of recognizing mobile source emission reductions at facilities covered in the AQMP Facility-Based Measures. <i>Zorik Pirveysian 909.396.2431 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	AQMP
Reg. XXVII	<p>Climate Change Changes may be needed to Regulation XXVII to add or update protocols for GHG reductions, and other changes. <i>Zorik Pirveysian 909.396.2431 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176</i></p>	Other

**2018 MASTER CALENDAR
2018 To-Be-Determined (continued)**

To-Be-Determined	Title and Description	Type of Rulemaking
Reg. II, IV, XI, XIV, XXX and XXXV, XXIV*+‡	<p>Various rule amendments may be needed to meet the requirements of state and federal laws, implement OEHHA’s 2015 revised risk assessment guidance, address variance issues/ technology-forcing limits, to abate a substantial endangerment to public health or welfare, address odor nuisance issues, air toxics, 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, and 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. Rule amendments, proposed new source-specific, or industry-specific rules within Regulation XI may be needed to meet the requirements of AB 617 and the 2016 AQMP commitment to transition the RECLAIM program to a command-and-control regulatory structure. Amendments to Regulation XIV may be needed for implementation of AB 617.</p>	Other/AQMP

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BOARD MEETING DATE: July 6, 2018

AGENDA NO. 16

REPORT: 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, June 8, 2018; Reviewed

RECOMMENDED ACTION:
Receive and file.

Wayne Natri
Executive Officer

RMM:MAH:OSM:agg

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
July 6, 2018 Board Meeting
Information Management Status Report on Major Ongoing and
Upcoming Projects During the Next Six Months

Project	Brief Description	Budget	Completed Actions	Upcoming Milestones
Implementation of Enterprise Geographic Information System (EGIS) (Phase II)	Continue to support the agency's mission through the effective and cost-efficient implementation of EGIS and related technologies		<ul style="list-style-type: none"> • Purchased ESRI extensions for OnBase 	<ul style="list-style-type: none"> • Complete the six prioritized EGIS projects: <ul style="list-style-type: none"> ○ GIS Data Development ○ Portal / Mobile Development ○ OnBase Expansion and GIS Integration ○ CLASS GIS Integration ○ One-click Site Report System Documentation
Office 365 Implementation	Acquire and implement Office 365 for SCAQMD Staff	\$300,000	Pre-assessment evaluation and planning	<ul style="list-style-type: none"> • Acquire Office 365 licenses • Develop implementation and migration plan • Implement Office 365 email (Exchange) and migrate all users • Implement Office 365 file storage (OneDrive for Business) and migrate users • Implement Office 365 internal website (SharePoint) and migrate existing content

Project	Brief Description	Budget	Completed Actions	Upcoming Milestones
Permitting System Automation Phase 1	New Web application to automate the filing of all permit applications with immediate processing and issuance of permits for specific application types: Dry Cleaners (DC), Gas Stations (GS) and Automotive Spray Booths (ASB)	Phase 1 \$450,000 Phase 1.1 \$200,000	<ul style="list-style-type: none"> • Phase 1 400A Form Filing and DC permit processing application complete and deployed to production • Phase 1.1 DC with Facility ID integration completed and deployed to production • Phase 1.1 GS and ASB permit processing modules enhanced to support R1401 rule changes. Final acceptance testing completed and staged for deployment 	<ul style="list-style-type: none"> • Full deployment of GS and ASB modules
Permitting System Automation Phase 2	Enhanced Web application to automate permit application process for Registration Equipment, IC Engines, and Vapor Recovery systems; and implement electronic permit folder and workflow for internal SCAQMD users	\$610,000	<ul style="list-style-type: none"> • Phase 2 task project started May 22, 2018. Detail project plan and requirements gathering 	<ul style="list-style-type: none"> • Database design • Functional design

Project	Brief Description	Budget	Completed Actions	Upcoming Milestones
Air Quality Index Rewrite and Migration	Develop new Web Service and/or Web Application Program Interface to migrate Air Quality Index function from FORTRAN computer to STA's data management system	\$83,700	<ul style="list-style-type: none"> • AQI Calculation Web Service and Hourly Update development modified and enhanced to support AQ Sensors • Development work and initial acceptance testing completed • Acceptance testing completed and application moved to production 	<ul style="list-style-type: none"> • Post production monitoring and validation
Information Technology Review Implementation	Complete Board requested Information Technology review and initiate work on implementation of key recommendations	\$75,000	<ul style="list-style-type: none"> • Initiated Implementation Planning and Resource Requirements for key recommendations • Conducted recruitment process to fill Systems & Programming Supervisor position • Scheduled and completed Microsoft Project Plan training for all IM Managers, Supervisors and Secretaries • Established Information Technology Steering Committee, members and charter 	<ul style="list-style-type: none"> • Office 365 Deployment planning • Configuration and deployment of Project Management software for IM team
Permit Application Status and Dashboard Statistics	New Web application to allow engineers to update intermediate status of applications; create dashboard display of status summary with link to FIND for external user review	\$104,591	<ul style="list-style-type: none"> • Task order issued and awarded • Project started April 10, 2018 • Business process model and wire frame deliverable work completed 	<ul style="list-style-type: none"> • Functional design and code development

Project	Brief Description	Budget	Completed Actions	Upcoming Milestones
Agenda Tracking System Replacement	Replace aging custom agenda tracking system with 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"> Released RFP December 4, 2015 Awarded contract April 1, 2016 Continued parallel testing Conducted survey of stakeholder satisfaction As a result of the survey responses, the decision was made to develop a custom user interface for the application. 	<ul style="list-style-type: none"> Revise project scope to include custom user interface Develop plan and schedule for revised scope
Replace Your Ride (RZR)	New Web application to allow residents to apply for incentives to purchase newer, less polluting vehicles	\$211,820	<ul style="list-style-type: none"> Phase 2 Fund Allocation, Administration and Management Reporting modules deployed and in production 	<ul style="list-style-type: none"> Phase 3 collaboration with air districts for possible statewide RZR implementation
SCAQMD Mobile Application for Apple and Android phones	New mobile application to provide air quality and SCAQMD notification and event information	\$126,010	<ul style="list-style-type: none"> Task order issued evaluated and awarded 	<ul style="list-style-type: none"> July Board letter for project approval and funding
FIND System Replacement	Update and replace Facility Information Detail (FIND) application	\$148,150	<ul style="list-style-type: none"> Task order issued, evaluated and awarded Detail project planning 	<ul style="list-style-type: none"> Wire frame development
Legal Division New System Development	Develop new web-based case management system for Legal Division to replace existing JWorks System	\$500,000	<ul style="list-style-type: none"> New system development for Legal Division approved March 2, 2018 	<ul style="list-style-type: none"> Task order issuance, evaluation and award
Document Conversion Services	Document Conversion Services to convert paper documents stored at SCAQMD facilities to electronic storage in OnBase	\$82,000		<ul style="list-style-type: none"> Release RFP July 6, 2018 Approve qualified vendors October 5, 2018

Shaded Projects – Projects completed and will be removed from this list on subsequent reports

Completed Projects	
Project	Date Completed
CLASS Database Software Licensing and Support	November 30, 2017
Website & Evaluation Improvements	January 6, 2018
Information Technology Review	January 31, 2018
Prequalify Vendor List for PCs, Network Hardware, etc.	February 3, 2018
Renewal of HP Server Maintenance & Support	April 6, 2018
Enterprise Geographic Information System (EGIS) (Phase I)	May 30, 2018
Fiber Cable Network Infrastructure Upgrade	May 30, 2018

BOARD MEETING DATE: July 6, 2018

AGENDA NO. 18

REPORT: Administrative Committee

SYNOPSIS: The Administrative Committee held a meeting on Friday, June 8, 2018. The following is a summary of the meeting.

RECOMMENDED ACTION:
Receive and file.

Dr. Clark E. Parker, Sr., Acting Chair
Administrative Committee

nv

Committee Members

Present: Dr. Clark E. Parker, Sr./Acting Chair (videoconference), Mayor Ben Benoit/Vice Chair, and Mayor Pro Tem Judith Mitchell

Absent: Dr. William A. Burke/Chair

Call to Order

Dr. Parker called the meeting to order at 10:00 a.m.

DISCUSSION ITEMS:

- 1. Board Members' Concerns:** None to report.
- 2. Chairman's Report of Approved Travel:** As noted on the travel report, Mayor Pro Tem Mitchell will attend the monthly CARB Board meeting as the SCAQMD Board representative in Sacramento, CA, June 28-29, 2018. Mayor Pro Tem Mitchell and Supervisor Shawn Nelson will meet with members of the California Senate and House delegation to ask the federal government to do its fair share in reducing emissions in Washington, D.C., July 9-12, 2018. Dr. Joseph Lyou and Supervisor Janice Rutherford will attend the CCEEB Summer Issues Seminar in Squaw Valley, CA, July 15-19, 2018.
- 3. Report of Approved Out-of-Country Travel:** None to report.
- 4. Review July 6, 2018 Governing Board Agenda:** None to report.

5. **Approval of Compensation for Board Member Assistant(s)/Consultant(s):** Compensation for consideration was included for all current Board Assistants and Consultants for FY 2018-19.

Moved by Mitchell; seconded by Benoit, unanimously approved.

Ayes: Benoit, Mitchell, Parker
Noes: None
Absent: Burke

6. **Pre-Audit Conference:** Assistant Deputy Executive Officer/Finance Sujata Jain reported that this is a pre-audit conference for the financial audit and the single audit for FY 2017-18. Auditors BCA Watson Rice LLP and Helen Chu (Partner) were present. Ms. Chu reported that once the audit is completed, opinions will be provided on the financial statements and on compliance with major federal programs. Internal controls will be reviewed to identify any material weaknesses or deficiencies, and a separate report will be issued regarding internal controls. The audit is scheduled to begin on June 19, 2018 for two weeks for planning and internal control review. The auditors will return on August 14, 2018 for the financial and single audit substantive and compliance testing. The report is expected to be completed in early October and a draft audit report will be presented to the Administrative Committee in early November. Mayor Pro Tem Mitchell commented that SCAQMD and public constituents are always concerned about the unfunded liability on pensions and addressing that issue would be helpful. Mayor Benoit commented that on the City of Wildomar's website, there is a web-based tool where the city can see the current unfunded liabilities, which provides an opportunity to update contracts. Dr. Parker asked where the unfunded liabilities will be noted on the report. Ms. Chu responded that the pension liability will be included in the financial statements, in addition to the notes.
7. **SCAQMD Pension Status Update:** Ms. Jain provided a presentation regarding pension liabilities. She reported that the SCAQMD formerly purchased Pension Obligation Bonds to offset SBCERA's increased contribution cost, but this approach did not work. Other options to offset liabilities include state pension reform; and after the Pension Obligations Bonds are paid off, the SCAQMD can set aside money to offset the net pension liability. Mayor Pro Tem Mitchell inquired whether the SCAQMD offers post-employment benefits. Ms. Jain responded no. Mayor Pro Tem Mitchell inquired about pension obligation cost. Ms. Jain responded that the remaining balance of the pension obligation bonds is \$36 million. Mayor Pro Tem Mitchell inquired whether there has been any consideration in paying down the pension liability to avoid additional interest accumulating. Dr. Parker inquired whether the bonds were issued without a call option and if the bonds are tax-exempt. Ms. Jain responded that one of the bonds

cannot be paid prior to maturity. Dr. Parker further added that tax exempt bonds are at a going rate of 4% and if we are paying double the amount in interest, especially if there is a call option to refinance them, then we could save half the cost. Ms. Jain responded that the 2004 bonds were issued at 5.5%, and at that time SBCERA's rate of return was projected to be 8%.

- 8. Status Report on Major Ongoing and Upcoming Projects for Information Management:** Technology Implementation Manager/Information Management Ora McEwan reported that projects are progressing well. The fiber cable upgrade has been completed, and the GIS open data portal, and the air quality index upgrade and conversion have gone live. All other projects are proceeding on schedule.

ACTION ITEMS:

- 9. Transfer and Appropriate Funds and Execute Contract for Short- and Long-Term Systems Development Maintenance and Support Services:** Ms. McEwan reported that this item is a request to execute a contract with a software development firm that has been previously approved by the Board to provide funding for the development of a mobile phone application. Mayor Benoit inquired whether that was a new application for the SCAQMD. Ms. McEwan explained that the current application was built in 2005 and will be replaced with two applications; one for Apple phones and one for Android phones. Mayor Benoit further commented that it would be beneficial to incorporate the GIS application into the new phone application. Ms. McEwan confirmed that there will be GIS capabilities.

Moved by Mitchell; seconded by Benoit, unanimously approved.

Ayes: Benoit, Mitchell, Parker
Noes: None
Absent: Burke

- 10. Recognize Revenue and Transfer and Appropriate Funds for Air Monitoring Programs, and Issue Solicitations and Purchase Orders for Air Monitoring and Laboratory Equipment Plus One Vehicle:** Assistant Deputy Executive Officer/Science & Technology Advancement Dr. Jason Low reported that this is an annual item. SCAQMD is expected to receive grant awards for two air monitoring programs. This action is to recognize revenue from those awards once they are received; recognize and appropriate the remaining funds from other U.S. EPA monitoring programs, as well as the community air toxics programs; and to purchase air monitoring and laboratory equipment, and a vehicle. Dr. Parker inquired whether the monitors will be low-cost or the more

traditional monitoring equipment. Dr. Low responded that these will be the reference-level equipment, not low-cost sensors.

Moved by Mitchell; seconded by Benoit, unanimously approved.

Ayes: Benoit, Mitchell, Parker
Noes: None
Absent: Burke

11. **Authorize the Executive Officer to Enter into the CARB AB 197 Grant Agreement, Recognize Revenue, and Appropriate Funds to Support the SCAQMD's Annual Emissions Reporting Software:** Planning and Rules Manager/Planning, Rule Development & Area Sources Ian MacMillan reported that this item is for the Annual Emissions Reporting (AER) program where emissions information will be collected to report to CARB under AB 197. CARB currently publishes all of the emissions information on their website, utilizing the air pollution mapping tool. As part of that data collection effort, back-end technical work is needed. CARB is providing grants to air districts to help collect the information to pass through to CARB. This action is to authorize the Executive Officer to enter into that grant agreement. The amount will be \$50,000 in the first year and \$25,000 per year thereafter. The funds for the first year will be used to help maintain and upgrade the SCAQMD Annual Emissions Reporting software that is used to collect emissions information.

Moved by Benoit; seconded by Mitchell, unanimously approved.

Ayes: Benoit, Mitchell, Parker
Noes: None
Absent: Burke

WRITTEN REPORT:

12. **Environmental Justice Advisory Group Draft Minutes for the April 20, 2018 Meeting:** Deputy Executive Officer/Legislative, Public Affairs & Media Derrick Alatorre reported that this item is a written report.

OTHER MATTERS:

13. **Other Business**
There was no other business.

14. Public Comment Period

There were no public comments.

15. Next Meeting Date

The next regular Administrative Committee meeting is scheduled for July 13, 2018 at 10:00 a.m.

Adjournment

The meeting adjourned at 10:38 a.m.

Attachment

Draft Environmental Justice Advisory Group Minutes for the April 20, 2018 Meeting

ENVIRONMENTAL JUSTICE ADVISORY GROUP
FRIDAY, APRIL 20, 2018
MEETING MINUTES

MEMBERS PRESENT:

Ben Benoit, SCAQMD Governing Board, Mayor of the City of Wildomar
Rhetta Alexander, Valley Interfaith Council
Manuel Arredondo, Coachella Valley School District, Retiree
Dr. Larry Beeson, Loma Linda University, School of Public Health
Suzanne Bilodeau, Knott's Berry Farm
Paul Choe, Korean Drycleaners & Laundry Association
Dr. Afif El-Hasan, American Lung Association
Mary Figueroa, Riverside Community College
Dr. Jill Johnston, University of Southern California
Dr. Monique Hernandez, California State University, Los Angeles
Daniel Morales, National Alliance for Human Rights
Donald Smith, Black Club 136th Street
Rafael Yanez, Member of the Public
David McNeill, BHC

MEMBERS ABSENT:

Dr. Clark E. Parker, SCAQMD Governing Board, Vice Chair
Dr. Joseph Lyou, SCAQMD Governing Board, EJAG Chairman
Micah Ali, Compton Unified School District
Kerry Doi, Pacific Asian Consortium in Employment
Myron Hale, SLMQM
Maria Elena Kennedy, Quail Valley Task Force
Evelyn Knight, Long Beach Economic Development Commission
Angelo Logan, Occidental College & East Yard Communities for Environmental Justice
Woodie Rucker-Hughes, NAACP - Riverside Branch

SCAQMD STAFF:

Fabian Wesson, Assistant Deputy Executive Officer/Public Advisor
Nancy Feldman, Principal Deputy District Counsel, Legal
Daniela Arellano, Senior Public Information Specialist
Cassandra Johnson, Public Affairs Specialist
Mark Henninger, Technology Implementation Manager
Dr. Jo Kay Ghosh, Health Effects Officer
Brandee Keith, Secretary

Agenda Item #1: Call to Order/Opening Remarks

Governing Board Member Ben Benoit called the meeting to order at 12:20 PM and welcomed everyone to the meeting. Prior to approval of the previous meeting's minutes, Chair Benoit led a brief round of introductions of members of the EJAG and SCAQMD staff present.

Agenda Item #2: Approval of January 26, 2018 Meeting Minutes

The minutes for the January 26, 2018 meeting were approved with no objections.

Agenda Item #3: Review of Follow-Up Items

Ms. Fabian Wesson reviewed the follow up items from the January 26th meeting.

- Contact Information sheets were provided to attendees and members were asked to complete them, for the EJ team to update group records.
- AB 617 applications were made available and members were invited to take copies, prepare recommendations of their community or others to be considered for the program, and distribute the applications among other interested groups. Chair Benoit pointed out the list of current communities being considered was also available.
- Ms. Wesson announced a call for nominations for the upcoming 30th Annual Clean Air Awards. She gave brief summary of the Awards as well as a list of nominee categories.
- Ms. Wesson also announced the open application period for Carl Moyer funding and gave an explanation of the program goals and requirements for application.
- An upcoming meeting was announced for the Funding Working Group for the 2016 Air Quality Management Plan (AQMP), which will take place on April 27th at 1 p.m. in conference room GB.

Agenda Item #4: SCAQMD Website Tutorial (Henninger)

Mark Henninger, of SCAQMD's Information Management team, demonstrated navigation of the district's recently re-designed website. Mr. Henninger focused especially on sharing the search tools and records archives available to the public, explaining the best ways to access and utilize these tools. He also showed members how to locate events and current announcements.

Mr. Rafael Yanez commented that from a user perspective the mobile website is not intuitive or easy-to-navigate, and means of contacting SCAQMD to make complaints are not readily apparent. Mr. Yanez suggested making such contact information more up-front. Chair Benoit shared a brief explanation of a new GIS tool which would soon be implemented, for easier search capability.

Agenda Item #5: Updates on the Multiple Air Toxics Exposure Study (MATES) V (Ghosh)

SCAQMD Health Effects Officer Jo Kay Ghosh delivered a presentation on the MATES program, reviewing the history and historical findings of previous studies, as well as the scope and objectives for the current study in progress.

Dr. Jill Johnston requested clarification on the types of advanced monitoring techniques that would be used in the study, and what they would measure. Dr. Ghosh gave a quick rundown of which toxins the various technologies would record; Mr. Jason Low added a brief explanation of those toxins monitored by aerospace monitors. Dr. Johnston inquired whether there were strategies in mind to track smaller-scale information on metals or ultrafine particles, and staff explained that several monitoring projects and initiatives accounted for these toxins, and would be part of a larger comprehensive air toxics approach.

Mr. David McNeill asked if there was a strategy for deployment of the advanced air monitoring equipment, and what went into that strategy, especially as it pertained to oil fields vs. refinery locations. Mr. Low pointed out that for MATES V, the predominant focus will be on areas near refineries, as part of determining the best uses, comparisons, and limitations of the different technologies to build a toolbox of information to use in future air toxics initiatives. Mr. McNeill also brought up a community health study done by the Department of Public Health of County of Los Angeles, pointing out that DPH had used old MATES data, and asked if the "non-advanced" techniques used in the MATES study could deliver a more comprehensive and accurate look at air toxics health risks. Dr. Ghosh confirmed based on the new strategies for MATES V, a better analysis of air toxics risks would be possible.

Mr. Donald Smith expressed concern for the city of Compton and asked whether there were plans for a MATES study in or around Compton. Dr. Ghosh confirmed one of the MATES V fixed-site monitors was located in Compton, and added that additional work with the Community Air Toxics Initiative (CATI) continued to focus on the areas in and around Compton.

Dr. El-Hassan expressed interest in seeing the results of the MATES aerospace measurements and optical tent monitors, and suggested that, if successful and viable, these technologies be considered for a future "air quality patrol" to make communities safer.

Ms. Rhetta Alexander asked if the specific locations of the ten fixed-station monitors could be found on the SCAQMD website. Dr. Ghosh confirmed that the previous locations from the MATES IV study were posted online, but documents for MATES V would not be posted for some time. Alternatively, however, the specific information could be directly provided by staff. The majority of sites remained the same as during the previous study. Chair Benoit commented on the improvement of coverage and potential data that would be available thanks to the added technologies included in MATES V. Ms. Alexander asked what sorts of mitigation and control efforts would be implemented in response to the findings of study, to which Dr. Ghosh replied with a brief explanation of how MATES V data might be used in the assessment and implementation of AB 617 projects, as well as future incentive programs and rule-making.

Mr. Yanez asked why the MATES study includes only ten fixed-monitor sites, when demands of increased urbanization and national environmental regulatory trends would suggest a need for more comprehensive coverage. Chair Benoit offered his opinion that SCAQMD and other environmental regulation entities would work hard to meet the upcoming challenges.

Ms. Monique Hernandez asked for clarification on the differences between different monitoring technologies and whether they approximated one another, whether one was intrinsically more

effective. Mr. Low gave a brief rundown of the different means of measuring pollution, as well as the differing costs of the monitors. Ms. Hernandez also suggested an element of messaging or direction in regards to the risk map available on the SCAQMD website.

Chair Benoit added a comment supporting and encouraging the use of "purple" air sensors to help monitor PM in local communities.

Agenda Item #6: Member Updates

None

Agenda Item #7: Other Business

Mr. McNeill asked about the deadline for submitting the self-recommendation form for AB617 projects, and Dr. Ghosh confirmed it was May 7th.

Dr. El-Hassan reminded members that the American Lung Association had published a State of the Air Report rating air quality levels in the local area.

Mary Figueroa commented on the political push to lessen regulation on environmental factors affecting communities, in order to lessen the burden on companies and corporation. She expressed thanks to the advisory group for its continued efforts but also expressed frustration that political entities did not appear to be moved.

Agenda Item #8: Public Comment

None offered

Agenda Item #9: Next Meeting was set for Friday, July 27, 2018

Chair Benoit adjourned the meeting at 1:45 pm

BOARD MEETING DATE: July 6, 2018

AGENDA NO. 19

REPORT: Legislative Committee

SYNOPSIS: The Legislative Committee held a meeting on Friday, June 8, 2018. The following is a summary of the meeting.

Agenda Item	Recommendation/Action
AB 2145 (Reyes) Vehicular air pollution.	Support
SB 1260 (Jackson) Fire prevention and protection: prescribed burn	Support With Amendments
HR 4421 (DeSaulnier) Establish parity for electric vehicle technology.	Pulled

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

Committee Members

Present: Mayor Pro Tem Judith Mitchell/Chair, Council Member Joe Buscaino/Vice Chair (videoconference), and Dr. Clark E. Parker, Sr. (videoconference).

Absent: Dr. William A. Burke, Supervisor Shawn Nelson and Supervisor Janice Rutherford.

Call to Order

Chair Mitchell called the meeting to order at 9:01 a.m.

DISCUSSION ITEMS:

1. Update on Federal Legislative Issues

SCAQMD's federal legislative consultants (Carmen Group, Cassidy & Associates, and Kadash & Associates) each provided a written report on various key Washington, D.C. issues.

Mr. Gary Hoitsma, federal legislative consultant, reported that the U.S. EPA Science Advisory Board met in late May and early June and recommended to the U.S. EPA Administrator that the proposed rulemaking on the Corporate Average Fuel Economy (CAFE) standards and the pending final rule on Glider trucks should be postponed, pending a better scientific review. Mr. Hoitsma stated that U.S. EPA is under no obligation to accept this recommendation.

Mr. Hoitsma also reported that initial reports are that the Department of Transportation may be granting 27 awards, releasing \$1.5 billion dollars, for major highway projects under the “Infrastructure For Rebuilding America” (INFRA) grant program, including one congestion relief project in Los Angeles on Interstate 5. Mr. Hoitsma stated that most of the funding appears to be going to rural areas.

Mr. Hoitsma also reported that Francis Brooke has been promoted to Special Assistant to the President for Economic Policy and Energy and Environment Issues.

Mr. Mark Kadesh, federal legislative consultant, gave an update on the House Interior Appropriations Subcommittee, which is chaired by Congressman Ken Calvert. Mr. Kadesh reported that the Committee has passed its appropriations bill, which would authorize \$100 million for the Diesel Emission Reduction Act (DERA) Program and \$55 million for the Targeted Airshed Grant Program.

Mr. Kadesh also reported that he has been working with SCAQMD staff to have U.S. EPA take action on SCAQMD’s petition for an ultra-low NOx emissions standard for heavy-duty trucks. These efforts have included discussions with Congressmen Pete Aguilar and Ken Calvert and with Senate Offices about potentially arranging colloquies on the House and Senate floors on this issue, in conjunction with the respective houses’ appropriation bills.

Mr. Kadesh also stated that he has reached out to Senators Dianne Feinstein and Tom Udall to encourage them to adopt report language urging expeditious consideration and action by U.S. EPA on the ultra-low NOx emissions petition.

Mr. Kaleb Froehlich, federal legislative consultant, reported that the House passed their energy and water appropriations bill and that it was now waiting for Senate action. Mr. Froehlich also stated that the Senate Interior Appropriations Subcommittee has not yet released their bill, but that it is expected in the next week. Mr. Froehlich also stated that the House passed the Trump Administration’s rescissions package, in which \$15 billion in previously allocated funding would be rescinded, including \$4.3 billion in loan funding for the DOE for fuel efficiency and advanced vehicle technology. It is unclear whether this package will move through the Senate, but until June 22 only a simple majority of votes is needed to pass the bill.

2. Update on State Legislative Issues

SCAQMD's state legislative consultants (The Quintana Cruz Company, California Advisors, LLC and Joe A. Gonsalves & Son) provided written reports on various key issues in Sacramento.

Ms. Roxanna Bekemohammadi, state legislative consultant, gave an update on various state bills, including:

- AB 2506 (Burke), which was supported by SCAQMD, regarding changing fuel usage requirements for state fleet vehicles, was held in Assembly Appropriations Committee and will not be moving forward;
- AB 2091 (Grayson), which is supported by SCAQMD, is an omnibus bill relating to prescribed burn issues. The author accepted SCAQMD's suggested amendments and the bill has now moved to the Senate; and
- AB 327 (Gipson) which is an authorization bill sponsored by SCAQMD regarding the use of cleaner technology in public fleets within the South Coast region. This bill is in the Senate.

Mr. Jacob Moss, state legislative consultant, reported that state budget negotiations are ongoing and gave an update on the cap-and-trade expenditure plan, AB 617 implementation funding and Carl Moyer monies. Mr. Moss stated that a budget deal would likely occur by June 11 so that a vote on the budget bill can occur on June 15.

Mr. Moss also gave an update on two state bills:

- SB 1502, which is sponsored by SCAQMD, and allows local air districts to provide public notice electronically. This bill has a policy committee hearing on June 11, and
- SB 210 (Leyva), which is supported by SCAQMD, and deals with creating a smog check program for heavy-duty trucks. SCAQMD staff is having ongoing conversations with the Senator Leyva's office about potential amendments to the bill.

Mr. Moss stated that Senator Anthony Portantino is now the new chair of Senate Appropriations, and that while Assemblymember Cristina Garcia has returned to the Assembly, she has been stripped of all her committee positions, leaving Assemblymember Muratsuchi as her replacement as Chair of the Assembly Natural Resources Committee. Mr. Moss provided the names of the Assemblymembers appointed to the Budget Conference Committee; Assemblymembers: Phil Ting, Richard Bloom, Juan Arambula, Rocky Chavez, and Jay Obernolte.

In response to an inquiry from Chair Mitchell, Mr. Moss confirmed that AB 617 implementation funding is currently being proposed at \$50 million annually for two years.

Mr. Paul Gonsalves, state legislative consultant, gave an update on the state budget bill. Mr. Gonsalves stated that the bill would likely be in print by Tuesday, June 12, to be voted on by Friday, June 15, due to the 72-hour in-print rule. Additionally, there will likely be budget trailer bills that can be passed as late as August 31.

Mr. Gonsalves also gave an update on AB 2453 (E. Garcia), supported by SCAQMD, which relates to reducing students' exposure to air pollution. This bill has now passed the Assembly and is in the Senate and will be heard in policy committee on June 13th.

ACTION ITEMS:

3. Recommend Position on State Bills:

AB 2145 (Reyes) Vehicular air pollution.

Mr. Philip Crabbe, Community Relations Manager, presented AB 2145 to the committee. This bill, which is sponsored by CALSTART, would modify the Clean Truck, Bus, and Off-Road Vehicle and Equipment Program (Clean Truck Program) to fund additional technologies and would expand the criteria for funding through the Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP).

The bill makes changes to both programs to reflect the latest technological developments and the status of the clean vehicle market. It makes eligible for funding new types of projects – such as grid integration, integrated storage solutions, and charging management demonstration and analytics – areas that require further research if the state is going to help electrify the medium- and heavy-duty zero-emission vehicle sector. It would also require the California Energy Commission, through the ARFVTP, to emphasize development and deployment of technology and infrastructure.

The bill is in line with SCAQMD's goals of promoting the development and deployment of clean transportation technology, reducing criteria pollutant and toxic emissions, and protecting public health. It would also prioritize funding for disadvantaged communities, which are disproportionately impacted by environmental pollution.

Staff recommended a position of SUPPORT on this item.

Moved by Buscaino; seconded by Parker; unanimously approved

Ayes: Buscaino, Mitchell, Parker

Noes: None

Abstain: None

Absent: Burke, Nelson, Rutherford

SB 1260 (Jackson) Fire prevention and protection: prescribed burns.

Mr. Crabbe presented SB 1260 to the committee. The bill is an omnibus fire prevention and forestry management bill that would, among other things: promote long-term forest health and wildfire resiliency; authorize federal, state, and local agencies to engage in collaborative forestry management; and require CAL-FIRE and CARB, in coordination with local air districts, to develop and fund a program to enhance air quality and smoke monitoring, and provide a public awareness campaign regarding prescribed burns. That program may include purchasing new, year-round air quality monitors and shall include adequate funding for local air district participation and implementation costs.

The bill could have a positive effect on reducing air pollution within the South Coast by facilitating the use of controlled burns to reduce wildfires and the resulting severe air pollution, thereby protecting public health.

There are recommended amendments from staff, including an amendment to clarify that the Air Quality and Prescribed Burns Program should include purchasing new, “rapidly deployable air quality monitors,” rather than stationary “year-round air quality monitors.”

Staff also recommends amendments to the bill that address an issue that complicates the granting of controlled burn permits at the local level. Current law only allows an air pollution control officer to permit controlled burns in counties with a population of 6 million or less. This provision complicates SCAQMD’s ability to issue controlled burn permits for fire hazard mitigation within LA County, which has a population that far exceeds 6,000,000. Staff proposes an addition to the bill that would remove current law’s reference to a county population restriction, so that SCAQMD can have clear authority to issue controlled burn permits within LA County.

In response to an inquiry from Dr. Parker, Mr. Crabbe stated that the source and level of the funding had not yet been specified and that the bill states “upon appropriation by the Legislature.” However, there appear to be funds proposed in relation to the state budget that may provide funding for this bill. The bill also states that the program shall include adequate funding for local air district participation and implementation costs.

Staff recommended a position of SUPPORT WITH AMENDMENTS on this item.

Moved by Parker; seconded by Buscaino; unanimously approved

Ayes: Buscaino, Mitchell, Parker

Noes: None

Abstain: None

Absent: Burke, Nelson, Rutherford

HR 4421 (DeSaulnier) Establish parity for electric vehicle technology.

This item was pulled from the agenda by the Chair, and will be discussed at a future meeting.

OTHER MATTERS:

4. Other Business

There was no other business.

5. Public Comment Period

There were no public comments.

6. Next Meeting Date

The next regular Legislative Committee meeting is scheduled for Friday, July 13, 2018 at 9:00 a.m.

Adjournment

The meeting adjourned at 9:29 a.m.

Attachments

1. Attendance Record
2. Update on Federal Legislative Issues – Written Reports
3. Update on State Legislative Issues – Written Reports
4. Recommend Position on State and Federal Bills

ATTACHMENT 1

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
LEGISLATIVE COMMITTEE MEETING**

Attendance Record – June 8, 2018

Council Member Joe Buscaino (videoconference).....	SCAQMD Board Member
Mayor Pro Tem Judith Mitchell	SCAQMD Board Member
Dr. Clark E. Parker, Sr. (videoconference)	SCAQMD Board Member
Mark Abramowitz	Board Consultant (Lyou)
Ron Ketcham.....	Board Consultant (McCallon)
Andrew Silva.....	Board Consultant (Rutherford)
Roxy Bekemohammadi (teleconference)	The Quintana Cruz Company
Kaleb Froehlich (teleconference)	Cassidy & Associates
Paul Gonsalves (teleconference)	Joe A. Gonsalves & Son
Gary Hoitsma (teleconference)	The Carmen Group
Mark Kadesh (teleconference)	Kadesh & Associates
Jacob Moss (teleconference)	California Advisors, LLC
Tom Gross.....	Southern California Edison
Bill LaMarr.....	California Small Business Alliance
Rita Loof	RadTech
Susan Stark.....	Andeavor
Tammy Yamasaki	Southern California Edison
Derrick Alatorre	SCAQMD Staff
Leeor Alpern	SCAQMD Staff
Debra Ashby.....	SCAQMD Staff
Barbara Baird	SCAQMD Staff
Marian Coleman.....	SCAQMD Staff
Philip Crabbe.....	SCAQMD Staff
Philip Fine	SCAQMD Staff
Stacy Garcia	SCAQMD Staff
Fred Gonzalez	SCAQMD Staff
Don Hopps.....	SCAQMD Staff
Monika Kim	SCAQMD Staff
Megan Lorenz	SCAQMD Staff
Jason Low	SCAQMD Staff
Terrence Mann	SCAQMD Staff
Fred Minassian	SCAQMD Staff
Wayne Nastri.....	SCAQMD Staff
Robert Paud.....	SCAQMD Staff
Andrea Polidori	SCAQMD Staff
Jeanette Short	SCAQMD Staff
Danielle Soto.....	SCAQMD Staff
Lisa Tanaka O’Malley.....	SCAQMD Staff
Laki Tisopulos.....	SCAQMD Staff
Kim White.....	SCAQMD Staff
Jill Whynot.....	SCAQMD Staff
Paul Wright	SCAQMD Staff
Victor Yip.....	SCAQMD Staff
Kelsey Baez.....	Student Intern



Carmen Group
I N C O R P O R A T E D

ATTACHMENT 2

MEMORANDUM

To: South Coast AQMD Legislative Committee

From: Carmen Group

Date: May 24, 2018

Re: Federal Update -- Executive Branch

CAFÉ Standards Update: On May 11, the President met at the White House with key automaker CEOs and agency officials in a discussion about the how the Administration's coming revisions in corporate average fuel economy (CAFÉ) standards might—from the Administration's perspective-- help car companies in building more cars and light duty vehicles that are most popular with American consumers. The Administration is reportedly talking about freezing the standards at between 30 mpg and 37 mpg through 2025, as opposed to reaching the 54 mpg standard that was envisioned by the Obama Administration. The automakers in attendance reportedly said they did not support such a freeze, but were alternatively looking for some measure of certainty with a uniform national standard. The President tasked the EPA and the DOT to work with California on the standards and explore coming up with a single new standard for the nation. On May 23, the President's new energy advisor, Francis Brooke, along with EPA and DOT officials, met with Mary Nichols and senior CARB staff to begin discussions. A joint statement from the federal agencies following the meeting said the talks were "productive," but reaction from the California side -- which has already sued over the Administration's decision to change the Obama Administration's Mid-Term Evaluation -- was much more muted, with clear communication that the state was in no way prepared to retreat from a standard it believes is critical to public health. It appeared the only agreement reached at the meeting was that there would be more meetings. Meanwhile, SCAQMD staff met in Washington, DC May 22-24 with other DOT, White House and Congressional staff, and were told that the new proposed rule on CAFÉ would be published "soon," most likely in June, and would -- in addition to announcing and explaining the Administration's conclusions -- also outline a broad range of options potentially under consideration that would provide the basis for robust public comment from direct stakeholders and all other interested parties before any actual new regulation was finalized. Additional intelligence that we have gathered, including from interest group representatives closely attuned to the Administration's thinking, indicates that key players inside EPA, DOT and the White House believe there is little hope for a serious compromise, that California is not going to budge from its position, and that the Administration can't see going forward in a situation where -- as they interpret it -- California alone dictates national standards. Thus there is widespread resignation internally that the California waiver issue will have to be litigated, and the Administration is preparing accordingly.

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Infrastructure Update: Chances of seeing any big well-funded new infrastructure bill passed in Congress and signed into law this year have all but evaporated under the crush of legislative and political realities in this election year. The Administration's outline of its Infrastructure proposal – released in February – was largely dead-on-arrival in that it was wildly under-funded in the eyes of Democrats as well as many Republicans. The plan's emphasis on forcing states and localities to come up with their own new revenues to fund the bulk of the plan was poorly sold and a non-starter from the beginning. SCAQMD staff, in meeting with a key White House infrastructure official in Washington, DC in May, were essentially told that the Administration was not backing off of its policy approach and would likely seek to resurrect it again next year. Meanwhile, the outgoing chairman of the House Transportation & Infrastructure Committee, Rep. Bill Shuster (R-PA), telegraphed in May that he will introduce his own bipartisan infrastructure bill sometime this summer in the hopes that it might gain enough support on both sides to be seriously considered in a post-election lame duck session.

Glider Truck Rule Imminent: EPA seems poised to issue its final rule on the regulation of glider trucks (new truck bodies equipped with older engines) in the coming weeks, most likely sometime in June. The Agency's proposed rule came out in August of last year suggesting the repeal of emissions restrictions placed on glider trucks by the Obama Administration. Official public comment on the proposed rule – including from groups like SCAQMD that testified at a public hearing in December – has been largely in opposition. More recently, it has been reported that at least 12 Republicans in the House and four in the Senate have joined in opposition to the rule, as have former EPA Administrators from both the Bill Clinton and George W. Bush administrations.

DOE Funding Available for Research on Advanced Vehicle Technologies: On May 1, the Department of Energy's Office of Energy Efficiency and Renewable Energy announced that up to \$68.5 million will be available for early-stage research of advanced vehicle technologies, including advanced batteries and electrification, advanced cyber security related to electric vehicle charging, and advanced engines and fuels, among other things. Full applications are due July 13.

DOE Selects Nine Projects for Advanced Battery and Electrification Research: The Department of Energy's Vehicle Technologies Office within the Office of Energy Efficiency and Renewable Energy announced it was providing \$19 million in funding for nine research projects focused on developing electric vehicle systems that can recharge rapidly at high power levels, decreasing typical charge times to 15 minutes or less using a connector or wireless fast charging system.

EPA Extends Comment Period on Science Transparency Rule: The Environmental Protection Agency announced that it was extending the comment period on its proposed rulemaking entitled "Strengthening Transparency in Regulatory Science" from May 30 to August 16. The proposed rule issued on April 30 had a short 30-day comment period.

Subcabinet Appointments of Note:

- **EPA:** Mike Stoker of California to be **Regional Administrator for Region 9** (CA, AZ, NV, HI). Previously was director of government affairs for UnitedAg.
- **DOE:** Dr. Christopher Fall to be **Director of the Office of Science**. Now is Deputy Director of ARPA-E; previously was at the Office of Naval Research.

CASSIDY&ASSOCIATES

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(202) 347-0773
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To: South Coast Air Quality Management District

From: Cassidy & Associates

Date: May 24, 2018

Re: Federal Update

House Overview:

This month, Congressional leaders in the House are working through FY2019 appropriations bills with the hope of completing work before the July recess. Senate Majority Leader Mitch McConnell would like to wrap up appropriations in June. He and House Speaker Paul Ryan are currently negotiating a process both sides will be comfortable with.

With this timeline in mind, the House is preparing a 3-bill minibus after the Memorial Day recess. The appropriations package will include the FY 19 Energy-Water, Military Construction-VA and Legislative Branch spending bills.

Before the midterm elections, lawmakers have several items of interest they will attempt to reauthorize: National Defense Authorization Act, Farm Bill, Higher Education Act, and Federal Aviation Administration.

House Schedule update:

- Late May: Potential Rescissions package
- June: Appropriations spending bills.
- July/September: Tax permanency package

House Energy and Commerce Committee:

- On May 15 the House Energy & Commerce Committee held a hearing on legislation from Rep. Griffith (R-VA) to address New Source Review permitting reform. This draft bill would amend the definition of a “modification” of a source under Section 111(a) of the Clean Air Act, would eliminate compliance requirements association with Prevention of Significant Deterioration and Nonattainment under NSR if changes made to a source are not expected to result in “significant emissions increases.” The discussion draft from Rep. Griffith was strongly opposed by Democrats on the Committee during the hearing. [Link:](#)

<https://energycommerce.house.gov/hearings/legislation-addressing-new-source-review-permitting-reform/>.

- On April 26, Energy and Commerce held a five-hour hearing with EPA Administrator Scott Pruitt to discuss EPA's FY19 budget request. The hearing discussion was more focused on controversial spending and management decisions under the Administrator than on the substance of the budget itself. Link: <https://energycommerce.house.gov/hearings/the-fiscal-year-2019-environmental-protection-agency-budget/>
- In House Appropriations, the Energy & Water Subcommittee released its [bill](#) in early March and passed it out of Committee on March 16. Among other accounts it includes: \$303 million for the Vehicle Technologies Program, more than double the House's request from last year and about 10% lower than the final numbers agreed to (\$337.5) in the FY18 omnibus.

Rescissions Package Update:

On May 7th, the Trump Administration submitted a rescission package to Congress that proposes pulling back \$15 billion in spending from previously allocated funding. While it is unlikely the package will be approved by both the House and Senate as proposed, the process of sending the proposal to Capitol Hill for consideration freezes the identified funding for 45 legislative days. Included in the package of funding claw-backs is \$4.3 billion in Department of Energy loan funding for fuel-efficient and advanced technology vehicles. Additionally, some water-related EPA funding was targeted. The Administration has hinted that it will submit a second package. Given the inclusion of EPA funding in the first package and the increased funding EPA received in the Fiscal Year 2018 spending legislation, we should anticipate that the next proposal will target other EPA funding.

EPA Update

The Environmental Protection Agency continues to draw scrutiny from Congress and the media. In several recent incidences, journalists were barred from attention meetings related to regulation of toxic chemicals. On May 22 and May 23, journalists were asked to leave meetings related to increased regulation of chemicals used waterproof items, commonly referred to as PFAS. EPA Administrator Pruitt also appeared for the Senate Subcommittee responsible for the EPA budget where he was questioned on recent controversies and agency direction.

Senate Environment and Public Works Committee

The Senate Environment and Public Works Committee has been predominantly focused during the last few weeks on issues and legislation related to water infrastructure. This work culminated in the Committee's unanimous (21 – 0) passage of legislation entitled the America's Water Infrastructure Act of 2018. The legislation includes a range of provisions related to the Army Corps of Engineers and their missions at the nation's ports, waterways, and flood control.

In news related to EPA Administrator Pruitt, he is presently not expected to be asked to testify on the Environmental Protection Agency's Fiscal Year 2019 budget request. Six Senate Democrats (Ranking Member Carper, Whitehouse, Booker, Markey, Merkley, and Gillibrand) have written to the Chairman of the Environment and Public Works Committee (John Barrasso) requesting that he appear before the

committee, but he is not presently expected to request that Administrator Pruitt appear before the Committee.

Comprehensive Energy Legislation:

We continue to monitor the Energy and Natural Resources Act of 2017, which is pending on the Senate floor. Energy advocates and many Senators are continuously looking for an opening to consider energy legislation on the Senate floor. It is uncertain if there will be time to consider this bill prior to the August recess, given the Senate's desire to move through the appropriations process as quickly as possible. This legislation contains the Vehicle Innovation Act, which provides for \$250 million in authorized funding for the Department of Energy to fund vehicle technology advancement. Additionally, of importance to SCAQMD, is the inclusion of the DERA reauthorization language.

We suggest that SCAQMD once again write a letter in support of this provision and an expeditious process on this legislation. During our recent staff level meetings in Washington, DC, we conveyed South Coast's continued support for this legislation and sought to find ways to move this provision forward even if the larger package remains stalled.

SCAQMD
June 2018 Legislative Committee Board Meeting Report covering May 2018
Kadesh & Associates

Overview:

The House and Senate were in session for three of the five weeks in May. May was dominated with:

- 1- Ongoing consideration of House and Senate FY19 Appropriations; and
- 2- The planning, execution and follow up for DC trip by senior executive SCAQMD staff.
- 3- Ongoing issues with the proposed rule change by EPA/NHTSA to the existing CAFE/ghg standards.

DC Fly-in:

Senior Executive staff conducted three days of meetings/briefings with Congressional offices and agencies regarding SCAQMD priorities including: CAFE/ghg standards, Ultra Low NOx regulations, appropriations and other clean air issues.

Appropriations:

On May 15, the House Interior Appropriations Subcommittee (which includes EPA) marked up and passed out its FY19 bill to the full committee. Included in the bill were the following accounts of interest to AQMD: DERA received \$100m and Targeted Airshed Grants got \$55m. Both of these numbers are high water marks for these accounts. The full House Appropriations mark up of the Interior bill was scheduled for May 22, but was postponed due to illness of the full Committee Chairman. As of this writing, it has not been rescheduled.

The Senate Appropriations Committee advanced its first fiscal 2019 spending bills the last week of May. The Senate panel approved the Energy and Water and Agriculture-FDA bills by wide margins on May 24. The full House committee approved the Transportation-HUD bill that week, while the Financial Services-General Government Subcommittee approved its measure. House leaders are lining up a three-bill package (H.R. 5895) for floor action when Congress returns from the Memorial Day recess. The measure would combine the Energy and Water, Legislative Branch, and Military Construction-VA bills into a "minibus." Senate Republicans leaders are considering bills to the floor two at a time.

Budget Resolution:

Both chambers have already missed an April 15 formal deadline to agree on a budget, and neither has released a draft. The House and Senate may struggle to reach consensus on a resolution, particularly one that aligns with the increased discretionary budget caps and still achieves balance within 10 years. Also, it isn't yet clear if the budget resolution would align with the increase in non-defense discretionary spending allowed under the new budget caps set under the Bipartisan Budget Act (Public Law 115-123).

Rescissions:

On May 8, OMB Director Mick Mulvaney submitted to the President a list of 38 proposed "rescissions" of prior year budget authority totaling \$15.4 billion. If enacted, they would result in an actual reduction in federal outlays of \$3.0 billion. Only one affected EPA, and it was not in the air accounts. The House and Senate must both pass the package of rescissions and send it to the President for his signature in order for it to become law. While the House plans to act, it is doubtful if the Senate will take up this measure.

EPA - Amount proposed for rescission: \$10,000,000

Proposed rescission appropriations language:

“This proposal would rescind \$10 million in prior year balances, of which there were \$208 million available on October 1, 2017. This is EPA's primary account that funds salaries, travel, contracts, grants, and cooperative agreements for pollution abatement, compliance, and administrative activities of the operating programs. The funds proposed for rescission are targeted for competitive water quality research and support grants, which are duplicative with other Federal programs. Enacting the rescission would reduce funding for water quality research and support grants.”

CA Clean Air Act Waiver/CAFE/ghg standards for Model Years 2022-2025:

Since last month's initial report on this issue, the following developments have occurred:

Meeting with automakers and the White House occurred on May 11, at which it is reported that the automakers stressed the importance of deriving one standard for the nation and doing so quickly. Top executives of General Motors, Honda, Toyota, Ford and other companies met with President Trump to discuss trade and environmental standards enacted by the Obama administration. The executives emphasized their support for easing the Obama-era standards, but not so much that it triggers a conflict with California and results in a split market of environmental regulations set by Washington and Sacramento. “We are not asking the administration for a rollback,” Ford Chairman Bill Ford said yesterday during the automaker's annual meeting. “We want California at the table and we want one national standard.”

An unauthorized release of a letter written on May 3 by the automakers to the Administration occurred on May 21. The plea to the White House's Office of Management and Budget from the Alliance of Automobile Manufacturers, the industry's leading trade group said carmakers “strongly support” continued alignment between federal mileage standards and those set by California. General Motors Co., Ford Motor Co., Daimler AG and nine other carmakers are members of the Alliance.

“Automakers remain committed to increasing fuel efficiency requirements, which yield everyday fuel savings for consumers while also reducing emissions -- because climate change is real and we have a continuing role in reducing greenhouse gases and improving fuel efficiency,” wrote David Schwiertert, executive vice president of federal government relations at the Alliance.

The letter came roughly a week before President Donald Trump signaled he was open to talks with California on mileage standards. The direction came after the administration's April ruling that the Obama administration standards for model years 2022-2025 needed to be eased.

Court Battle Threat

Officials from the state have pledged to fight a Trump-led rollback, setting up a potential messy legal battle and the risk of different mileage requirements in California and 12 additional states that follow its rules. “Operating under two or three sets of regulations would be inefficient and disrupt a period of rapid innovation in the auto industry,” Schwiertert wrote, adding that fractured rules could have negative consequences for the roughly 7 million people employed directly or indirectly by the American auto industry.

A joint proposal for revised mileage targets from the Environmental Protection Agency and National Highway Traffic Safety Administration is still in the works and could be released by late May or early

June. A leaked draft of the proposal, led by the NHTSA, recommended freezing mileage requirements at a 37-miles-per-gallon fleet average from 2020 through 2026 instead of increasing each year to eventually reach about 50 miles per gallon.

In addition to voicing support for annual gains in efficiency requirements, the Alliance asked the White House to consider ways to keep California at the table, including extending the so-called national program of rules beyond 2025 and updating efficiency credit mechanisms.

White House meeting with CARB head Mary Nichols occurred on May 24. The resulting divergent appraisals of the productivity of that meeting led Ms. Nichols to express: "Sounds like a great meeting based on the WH press release. Too bad it's not the one we attended," Mary Nichols, chair of the state's Air Resources Board, tweets after she met with Trump administration officials on Wednesday. She added that she is ready if and when DOT and EPA "choose to engage in constructive dialogue and actions."

Currently, NHTSA (which is the lead agency on this matter) has eight options pending review and selection at the White House with their preferred alternative being a locking in of current standards though MY2026.

Activities summary:

- Advance planning for the future SCAQMD advocacy trips to DC commenced.
- Carried out executive staff fly-in May 22-24.
- Ongoing analysis and response to EPA/NHTSA announcement regarding the CA Clean Air Act waiver and proposals to alter CAFE/ghg standards for MY2022-2025.
- Analyzed and shared information on FY19 appropriations process.
- Continued to develop with staff a list of infrastructure-related projects and which can achieve SCAQMD goals and also work within legislative/executive authorizing/appropriating formats and programs.
- Continued to monitor and pass on relevant legislation of interest to SCAQMD.
- Participated in regular conference call with subsequent follow up assignments.
- Answered specific questions from SCAQMD staff.
- Kept staff updated as to legislative changes, committee assignments and confirmations.
- Monitored and shared updates on Administration regarding budget, appropriations, Interior, EPA, transportation, and environmental policies and personnel.

Outlook –

The failure to bring the House floor under a Rule vote of the Farm Bill and the inability of the Speaker to terminate the House Chaplain, point to the increasingly lame duck status of Speaker Ryan, casting doubt on at least some of the remaining House legislative agenda.

The stated House legislative agenda from the majority for the remainder of 2018 is:

FAA Reauthorization (passed House in April);

Flood Insurance Reauthorization;

Farm Bill Reauthorization with welfare/workforce rules;

Rescissions package (rolling back some of the recently agreed to increased spending levels);

WRDA (both House and Senate full committees have passed out their versions);

Taxes (House wishes to vote to make certain rates permanent; Senate wishes to pass an "extenders" bill for certain tax breaks that are set to expire);

Appropriations; and

Defense Authorization.

ATTACHMENT 3



May 24, 2018

TO: South Coast Air Quality Management District

FROM: The Quintana Cruz Company

RE: May 2018 Report

LEGISLATIVE ITEMS OF NOTE:

AB 2506 (Burke) State vehicle fleet: near-zero-emission vehicles.

The bill was last amended on April 19, 2018. The bill now mandates that at least **15%** of new vehicles with a gross vehicle weight rating (GVWR) of 19,000 pounds or more purchased by state agencies must be fueled by renewable natural gas beginning on **January 1, 2022**. In contrast, the bill prior to the recent amendment required that at least **30%** of newly purchased vehicles with a 19,000 GVWR or more be near-zero-emission by **January 1, 2020**. The bill was referred to Assembly Appropriations Suspense File and will be heard on May 25th.

Status: Assembly Appropriations Suspense File

AB 2091 (Grayson) Fire prevention: prescribed burns.

The bill was last amended on April 16, 2018. We are currently working with the author's office to address a few limitations in its current form. The bill was referred to Assembly Appropriations Suspense File and will be heard on May 25th.

Status: Assembly Appropriations Suspense File

Public Fleets Rule Bill (Gipson)

SCAQMD staff is currently working on a Public Fleets Rule bill with Assemblymember Gipson's Office, including meeting with interested stakeholders regarding the legislation.



SCAQMD Report
California Advisors, LLC
June 8, 2018 Legislative Committee Hearing

General Update

After the house of origin deadline passed on June 1st, the next critical milestone will be the passage of the 2018-19 budget by the statutory deadline of June 15th. Budget negotiations relevant to the South Coast include AB 617 implementation funding, AB 617 incentive funding, the Cap-and-Trade Expenditure Plan, and protection of the California Tire Fee funds for the Carl Moyer Program. The goal right now is to have all of these items negotiated and finalized by the June 15th deadline. However, if agreement is not reached on any of these items by the deadline, outstanding items can be resolved in trailer bills or the budget bill junior, both of which are not statutorily required to be passed by June 15th.

As of the writing of this report, only the Senate has announced the members of the Budget Conference Committee members: Senator Mitchell, Senator Nielson, Senator Roth, Senator Skinner, and Senator Moorlach. Conference committee hearings will begin on May 30th.

2018 Legislative Priorities

AB 617 (C. Garcia, 2017) Implementation funding

The Governor proposed to dedicate zero dollars for air districts to implement AB 617. On April 26th, a member sign-on letter with 51 signatures was delivered to the Senate pro Tem, the Speaker of the Assembly, and the Governor. The letter, jointly authored by Assemblymembers Grayson and Eduardo Garcia, requested a \$75 million statewide allocation for AB 617 implementation funding. The South Coast Air Quality Management District portion of this request is approximately \$25 million for the 2018-19 budget year.

STATUS: Both the Senate and Assembly proposed to allocate \$50 million annually statewide for two years for air districts to implement AB 617. The Senate proposed that these funds be appropriated from the Air Pollution Control Fund and the Assembly proposed that these funds be appropriated from the Environmental License Plate Fund. Because the Senate and Assembly proposals were not identical, this item will next be heard in Budget Conference Committee sometime in the first week of June.

Greenhouse Gas Reduction Fund Cap-and-Trade Expenditure Plan

The Senate, Assembly, and Governor have all released their proposed Greenhouse Gas Reduction Fund Cap-and-Trade Expenditure Plans. The Senate, Assembly, and Governor Plans are included for your review at the end of this report. Because all three plans deviate

from each other, this item will be heard in Budget Conference Committee as early as May 30th.

Tire Fee Funds Transfer to the Department of Fish and Wildlife

The Governor proposed to divert \$26 million of revenue generated annually by the Tire Recycling Management Fee from the Carl Moyer Program to the Department of Fish and Wildlife (DFW).

STATUS: Both the Senate and Assembly rejected the redirection of Carl Moyer funds to the DFW. However, because the Senate and Assembly proposed different funding amounts from the General Fund to the DFW, this item will be heard in Budget Conference Committee sometime in the first week of June. It is not expected that the threat to Carl Moyer funding will return but we will continue to monitor closely.

AB 2008 (Salas) Income taxes: exclusion: Carl Moyer Memorial Air Quality Standards Attainment Programs grants

AB 2008 would exclude from taxable gross income any funds provided to a taxpayer pursuant to the Carl Moyer Program.

STATUS: AB 2008 was held on suspense by the Assembly Appropriations Committee.

SB 1502 (Senate Environmental Quality) Electronic public notice authorization.

SB 1502 authorizes air districts to utilize electronic communications in lieu of paper mail with regard to public notices for public hearings and workshops.

STATUS: SB 1502 passed out of the Senate and has been referred to Assembly Natural Resources Committee and is not yet set for a hearing date.

SB 210 (Leyva) Heavy-duty vehicle inspection and maintenance program.

This bill would authorize the state board to develop and implement a Heavy-Duty Vehicle Inspection and Maintenance Program for non-gasoline heavy-duty on-road motor vehicles, as specified.

STATUS: South Coast Air Quality Management District is currently monitoring the stakeholder process as bill negotiations proceed. The bill is likely to be heard in the Assembly in late June and will then return to the Senate to be heard in late August.

The Assembly proposes the following 2018-19 Cap and Trade Expenditure Plan (as compared to the Governor's Plan):

Cap and Trade Expenditure Plan	2018-19 (In Millions)	
	Governor's Proposal	Assembly Proposal
AB 617 Community Air Protection	\$250	\$250
Technical assistance to Community Groups	5	5
Clean Vehicle Rebate Project	175	175
HVIP Clean Truck Buses and Off Road Freight	160	150
Demonstration Projects		30
Pilot Projects		50
Enhanced Fleet Modernization	100	100
Low Carbon Fuel Production	25	0
Ag Diesel Engine Replacement and Upgrades	102	85
Ag Energy Efficiency	34	34
Healthy Soils	5	5
Renewable Energy	4	4
Healthy and Resilient Forests	160	160
Prescribed Fire and Fuel Reduction	26.8	26.8
Northern, Coastal, and Southern California Regional Forest Health Projects	20	20
Local Fire Response	25	25
Methane Reduction	99	99
Waste Diversion	20	40
Transformative Climate Communities	25	25
California Integrated Climate Investment Program	20	20
Energy Corps	6	6
CA Climate Change Technology and Solutions Initiative	35	35
Low income weatherization	0	20
SWEEP	0	5
Urban Forestry	0	20
Urban Greening	0	60
Wetlands	0	20
Coastal Adaptation	0	6
Natural Lands Adaptation	0	20
Ports	0	50
BEACON	0	1
Totals	\$1,296.8	\$1,546.8

The Senate proposes the following 2018-19 Cap and Trade Expenditure Plan (as compared to the Governor's Plan):

Program	Department/Agency	Governor's Proposed 2018-19	Senate Proposal
Discretionary Spending			
Mobile Source Emissions			
Local air district programs to reduce air pollution	Air Resources Board	\$250	310
Clean Vehicle Rebate Project	Air Resources Board	175	150
Freight and heavy duty vehicle incentives	Air Resources Board	160	160
Low-income light duty vehicles and school buses	Air Resources Board	100	100
Low carbon fuel production	Energy Commission	25	5
Forestry			
Forest health and fire prevention	CalFire	207	250
Local fire suppression grants	Office of Emergency Services	25	10
Agriculture			
Agricultural equipment	Air Resources Board	102	102
Methane reductions from dairies	Food and Agriculture	99	99
Incentives for food processors	Energy Commission	34	34
Healthy Soils	Food and Agriculture	5	0
Agricultural renewable energy	Energy Commission	4	4
Other programs			
Climate and energy research	Office of Planning and Research	35	55
Transformative Climate Communities	Office of Planning and Research	25	80
Urban Greening	Natural Resources Agency	0	5
Waste diversion	CalRecycle	20	20
Integrated Climate Investment Program	Go-Biz	20	5
Energy Corps	Conservation Corps	6	10
Low-Income Weatherization	Community Service & Development	0	30
Technical assistance to community groups	Air Resources Board	5	5
Workforce development and training	CA Workforce Development Board	0.4	0.4
Total		\$1,297	\$1,434



Joe A. Gonsalves & Son

Anthony D. Gonsalves

Jason A. Gonsalves

Paul A. Gonsalves

PROFESSIONAL LEGISLATIVE REPRESENTATION

925 L ST. · SUITE 250 · SACRAMENTO, CA 95814-3766

916 441-0597 · FAX 916 441-5081

Email: gonsalves@gonsalvi.com

TO: South Coast Air Quality Management District

FROM: Anthony, Jason & Paul Gonsalves

SUBJECT: Legislative Update – May 2018

DATE: Friday, May 25, 2018

During the month of May, the Legislature is focused on Legislation and the State budget. All 2,334 bills the Legislature introduced (1,604 in the Assembly and 730 in the Senate) must pass out of house of origin fiscal Committee's by May 25, 2018. Meantime, Governor Brown released his final May Revision to the State budget. We will continue to monitor and track all legislation, amendments and budget actions of interest to the District and keep you apprised as they progress.

MAY REVISE

On Friday, May 11, 2018, Governor Brown released his final May Revision to the State Budget. The Governor noted State revenues are up \$8.8 billion, while quoting Sir Isaac Newton: "what goes up must come down" and emphasized the challenge in attempting to manage the State's budget volatility.

With the addition of \$8.8 billion in revenues, the Governor is proposing to spend \$5 billion for increased program costs to Medi-Cal, Cal Grants, child care, In-Home Supportive Services and foster care. Additionally, the May Revise proposes spending the remaining 3 billion in the areas of Homelessness (\$359 million), Mental Health (\$312 million) and Infrastructure (\$2 billion).

The \$2 billion in infrastructure would fund years of deferred maintenance at universities, courts, state facilities, flood control and renovation of the State Capitol.

The Cap and Trade Expenditure Plan was not laid out in the Governor’s May Revise, although the Governor has a \$1.2 billion plan that he has proposed and will have to negotiate with the Legislature on over the next few months.

We will continue to work with the Legislature, Governor, and State Agencies to ensure funding from the GGRF to the District.

CAP AND TRADE EXPENDITURE

The Governor’s January budget proposed a \$1.25 billion Cap and Trade Expenditure Plan consistent with the priorities specified in AB 398 (Eduardo Garcia, Chapter 135, Statutes of 2018), and the statutory requirements that at least 35% of expenditures benefit disadvantaged and low-income communities. The May Revision augmented that proposal by adding \$26.8 million and 79 positions for CalFIRE, to complete additional fuel reduction projects and treat 60,000 acres per year. The May Revision also added \$20 million for the Natural Resources Agency, to provide block grants to support regional implementation of landscape-level forest restoration projects that leverage non-state funding.

On May 23, 2018, the Assembly laid out their Cap and Trade plan which largely builds on the Administration’s proposal and makes additional investments in high-priority areas. The following will provide you with a side by side comparison of the Governor’s proposal vs. the Assembly’s proposal:

Cap and Trade Expenditure Plan	Governor's Proposal	Assembly Proposal
AB 617 Community Air Protection	\$250	\$250
Technical assistance to Community Groups	\$5	\$5
Clean Vehicle Rebate Project	\$175	\$175
HVIP Clean Truck Buses and Off-Road Freight	\$160	\$150
Demonstration Projects	\$0	\$30
Pilot Projects	\$0	\$50
Enhanced Fleet Modernization	\$100	\$100
Low Carbon Fuel Production	\$25	\$0
Ag Diesel Engine Replacement and Upgrades	\$102	\$85
Ag Energy Efficiency	\$34	\$34
Healthy Soils	\$5	\$5
Renewable Energy	\$4	\$4
Healthy and Resilient Forests	\$160	\$160
Prescribed Fire and Fuel Reduction	\$26.8	\$26.8
Northern, Coastal, and Southern Ca Forest Health Projects	\$20	\$20
Local Fire Response	\$25	\$25
Methane Reduction	\$99	\$99
Waste Diversion	\$20	\$40
Transformative Climate Communities	\$25	\$25
California Integrated Climate Investment Program	\$20	\$20
Energy Corps	\$6	\$6

CA Climate Change Technology and Solutions Initiative	\$35	\$35
Low income weatherization	\$0	\$20
SWEEP	\$0	\$5
Urban Forestry	\$0	\$20
Urban Greening	\$0	\$60
Wetlands	\$0	\$20
Coastal Adaptation	\$0	\$6
Natural Lands Adaptation	\$0	\$20
Ports	\$0	\$50
<u>BEACON</u>	<u>\$0</u>	<u>\$1</u>
Totals	\$1,296.8	\$1,546.8

AB 2453 (E. GARCIA) AIR POLLUTION: SCHOOLS.

This bill authorizes a modernization apportionment from state school facility bond funds to be used for air filtration systems at schools and authorizes schools located in communities burdened by air pollution to receive funding for air quality improvements.

Specifically, this bill allows schools to apply for state school facility bonds to modernize their air filtration systems with the goal of limiting student exposure to harmful air pollutants. In addition, AB 2453 allows schools or school districts located in communities with high cumulative air pollution burdens (CERPs) to work with local air districts to identify school sites for air quality adaptation efforts. Lastly, this bill ensures school districts are eligible to receive funding for air filter upgrades and installations and vegetation buffer plantings.

On May 16, 2018 the Assembly Appropriations Committee identified no fiscal effect on state school facility bond funds. The Committee noted that the bill may change the use of funds, but it would not change the overall amount of funding available. Additionally, the Committee recognized that this bill does not identify an administering agency or funding source. If the California Air Resources Board (ARB) is the implementing agency, there will be an additional workload. If AB 32 cap-and-trade auction revenues (GGRF) are used as the funding source, ARB will also have an additional workload even if ARB is not the implementing agency.

On May 25, 2018, the Assembly Appropriations Committee passed AB 2458 off the Assembly Appropriations Suspense file on a unanimous vote.

Our office has been working with Assemblymember E. Garcia’s office to identify additional and more effective ways to implement air pollution mitigation efforts on impacted school campuses. Additionally, we have been discussing possible amendments to the bill that would allow “modernization apportionments” to be used for “installing or updating” air filtration systems and clarifying that this bill does not limit the air districts’ discretion in developing and implementing community emission reduction programs.

We have been working with the Author’s staff to clarifying what types of grant funding source(s), in addition to modernization grants, would be applicable to funding the air pollution

mitigation efforts sought in this bill, since AB 617 does not yet provide any funding for grants as part of a community emission reduction program.

We will continue to work closely with the Author's office and keep you apprised as the issue progresses.

2018 LEGISLATIVE DEADLINES

May 25 Last day for **fiscal committees** to hear and report to the **Floor** bills introduced in their house. Last day for **fiscal committees** to meet prior to June 4.

May 29-June 1 Floor session only. No committee may meet for any purpose except for Rules Committee, bills referred pursuant to Assembly Rule 77.2, and Conference Committees.

June 1 Last day for each house to pass bills introduced in that house.

June 4 Committee meetings may resume.

June 15 Budget Bill must be passed by midnight.

June 28 Last day for a legislative measure to qualify for the Nov. 6 General Election ballot.

June 29 Last day for **policy committees** to hear and report **fiscal bills** to fiscal committees.

July 6 Last day for **policy committees** to meet and report bills.

Aug. 17 Last day for **fiscal committees** to meet and report bills.

Aug. 20-31 Floor session only. No committee may meet for any purpose except Rules Committee.

Aug. 24 Last day to **amend** on Floor.

Aug. 31 Last day for each house to pass bills. **Final Recess** begins on adjournment.

ATTACHMENT 4

AB 2145 (Reyes) Vehicular air pollution.

Summary: This bill would modify the Clean Truck, Bus, and Off-Road Vehicle and Equipment Program (Clean Truck Program) to fund additional technologies and expand the criteria for funding through the Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP).

Background: The Clean Truck Program is administered by CARB in conjunction with the California Energy Commission (CEC), to develop and deploy zero- and near-zero heavy-duty vehicles. Specifically, the program provides Greenhouse Gas Reduction Funds (GGRF) for projects that develop technology, demonstrate and test commercial deployment of zero- and near-zero medium- and heavy-duty truck technology, and facilitate clean goods movement. Funding priority is generally given to projects that benefit disadvantaged communities, have the ability to leverage additional public and private funding, and provide air quality co-benefits.

The ARFVTP is administered by CEC and provides funding for development and deployment of alternative and renewable fuels and advanced transportation technologies to help attain the state’s climate change and air quality goals. CEC prepares and adopts an annual investment plan that identifies the funding priorities for the coming fiscal year.

The governor issued Executive Order B-48-18, establishing new goals and a \$2.5 billion investment plan over eight years to reduce carbon emissions from transportation. The plan includes: a) 5 million zero-emission vehicles (ZEV) on the road by 2030 (\$1.6 billion over eight years), and b) 250,000 ZEV chargers, including 10,000 fast charging stations, and 200 hydrogen fueling stations by 2025 (\$900 million over eight years).

The governor’s budget proposes a total of \$235 million at the CEC through the ARFVTP for electrical vehicle charging and hydrogen fueling infrastructure projects.

Status: 5/30/2018 - In Senate. Read first time. To Com. on RLS. for assignment.

Specific Provisions: Specifically, this bill would:

- 1) Modify the Clean Truck Program as follows:
 - a. Add grid integration and integrated storage solutions, as well as charging management demonstration and analytics to the list of eligible projects that can be funded to support greater commercial motor vehicle and equipment efficiency.
 - b. Require CEC to advise CARB on how to allocate money for vehicle charging infrastructure consistent with the CEC’s investment plan strategies on charging infrastructure.

- c. Require CARB to promote projects that assist the state in reaching its climate goals beyond 2030 consistent with SB 32 (Pavley) of 2016 instead of by 2020, per AB 32 (Núñez) of 2006.
 - d. Require CARB to prioritize funding for communities with a community emissions reduction program.
- 2) Expand the ARFVTP as follows:
- a. Add infrastructure entities to the list of entities eligible for ARFVTP grants and other financial incentives.
 - b. Require CEC to emphasize the development and deployment of technology and infrastructure.
 - c. Add a project's ability to:
 - i. Deploy infrastructure not already deployed by other state agencies or utilities,
 - ii. Integrate fueling infrastructure and the grid, and;
 - iii. Match infrastructure to the deployment of advanced light-, medium-, and heavy-duty vehicles to the list on which CEC must base project prioritization.
 - d. Require that not less than 20 percent of funds appropriated for this program be allocated for the deployment of medium- and heavy-duty electric vehicle infrastructure.

Impacts on AQMD's Mission, Operations or Initiatives: This bill is in line with SCAQMD's goals in promoting the development and deployment of clean transportation technology, reducing criteria pollutant and toxic emissions and protecting public health. Disadvantaged communities are disproportionately affected by environmental pollution and other hazards, and this bill would prioritize funding for these affected communities.

This bill would help incentivize the adoption of new technologies and update program guidelines. This bill makes changes to both the CEC's and CARB's programs to reflect the latest technological developments and the status of the clean vehicle market, so that new project types are eligible for funding. It makes eligible for funding new types of clean vehicle projects – such as grid integration and integrated storage solutions, charging management demonstration and analytics – an area that requires further research if the state is going to help electrify the medium- and heavy-duty zero-emission vehicle sector.

In addition the bill updates the programs' guidelines and planning elements to ensure better coordination of investments between the agencies, as well as incorporates the state's most recent climate goals. CALSTART notes that making changes to both programs to reflect the latest technological developments and the status of the clean vehicle market is necessary so new project types are eligible for funding.

Recommended Position: SUPPORT

South Coast Air Quality Management District
Legislative Analysis Summary – AB 2145 (Reyes)
Version: As amended – 05/17/2018
Analyst: MK

SUPPORT:

CALSTART (Sponsor)
Silicon Valley Leadership Group

AMENDED IN ASSEMBLY MAY 17, 2018
AMENDED IN ASSEMBLY MARCH 15, 2018
CALIFORNIA LEGISLATURE—2017–18 REGULAR SESSION

ASSEMBLY BILL

No. 2145

Introduced by Assembly Member Reyes

February 12, 2018

An act to amend Sections 39719.2 and 44272 of the Health and Safety Code, relating to greenhouse gases.

LEGISLATIVE COUNSEL'S DIGEST

AB 2145, as amended, Reyes. Vehicular air pollution.

(1) 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.

Existing law establishes the California Alternative and Renewable Fuel, Vehicle Technology, Clean Air, and Carbon Reduction Act of 2007, which includes the Alternative and Renewable Fuel and Vehicle Technology Program, administered by the State Energy Resources Conservation and Development Commission, and the Air Quality Improvement Program, administered by the state board. The act requires the energy commission and state board to meet specified goals in fulfilling their responsibilities under their respective programs.

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, including, among others, projects that help to facilitate clean goods movement corridors. Existing law requires the state board, in consultation with the energy commission, to develop guidance through the existing Air Quality Improvement Program funding plan process for the implementation of the California Clean Truck, Bus, and Off-Road Vehicle and Equipment Technology Program that is consistent with the California Global Warming Solutions Act of 2006. Existing law requires the guidance to ensure that California Clean Truck, Bus, and Off-Road Vehicle and Equipment Technology Program investments are coordinated with specified funding programs developed as part of the California Alternative and Renewable Fuel, Vehicle Technology, Clean Air, and Carbon Reduction Act of 2007 and to promote projects that assist the state in reaching its climate goals beyond 2020. Existing law requires the state board, when evaluating potential projects to be funded under the California Clean Truck, Bus, and Off-Road Vehicle and Equipment Technology Program, to give priority to specified projects, including, among others a project that benefits specified disadvantaged communities.

This bill would add as eligible projects for the California Clean Truck, Bus, and Off-Road Vehicle and Equipment Technology Program those projects that support grid integration and integrated storage solutions and charging management demonstration and analytics. The bill would additionally require the energy commission, as part of the guidance developed for the program, to advise the state board on to how to allocate moneys for vehicle charging infrastructure consistent with the energy commission's investment plan strategies on charging infrastructure that is part of the California Alternative and Renewable Fuel, Vehicle Technology, Clean Air, and Carbon Reduction Act of 2007. The bill instead would require the guidance to promote projects that assist the state in reaching its climate goals beyond 2030. The bill would additionally require the state board, when evaluating potential projects to be funded under the program, to give priority to a project that benefits communities that have implemented a specified community emissions reduction program.

(2) Existing law requires the Alternative and Renewable Fuel and Vehicle Technology Program to provide funding measures to certain

entities to develop and deploy innovative technologies that transform California’s fuel and vehicle types to help attain the state’s climate change policies. Existing law requires the state board to give preference to those projects that maximize the goals of the program based on specified criteria.

This bill would add infrastructure entities to the list of eligible applicants and would add the development and deployment of infrastructure to the program’s emphasis. The bill ~~also~~ would add to the specified criteria the state board uses to determine preferential projects a project’s ability to deploy infrastructure not already deployed by other state agencies or utilities, integrate fueling infrastructure and the grid, and match infrastructure to the deployment of advanced light-, medium-, and heavy-duty vehicles. *The bill would require not less than 20% of funds allocated for the program to be available for the deployment of medium- and heavy-duty electric vehicle infrastructure.*

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 truck, bus, and off-road vehicle and
11 equipment technologies. Priority shall be given to projects
12 benefiting disadvantaged communities pursuant to the requirements
13 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
18 near-zero-emission medium- and heavy-duty truck technology,
19 including projects that help to facilitate clean goods movement
20 corridors. Until December 31, 2020, no less than 20 percent of

1 funding made available for purposes of this paragraph shall support
2 early commercial deployment of existing zero- and
3 near-zero-emission heavy-duty truck technology.

4 (2) Zero- and near-zero-emission bus technology development,
5 demonstration, precommercial pilots, and early commercial
6 deployments, including pilots of multiple vehicles at one site or
7 region.

8 (3) Zero- and near-zero-emission off-road vehicle and equipment
9 technology development, demonstration, precommercial pilots,
10 and early commercial deployments, including vehicles and
11 equipment in the port, agricultural, marine, construction, and rail
12 sectors.

13 (4) Purchase incentives, which may include point-of-sale, for
14 commercially available zero- and near-zero-emission truck, bus,
15 and off-road vehicle and equipment technologies and fueling
16 infrastructure to support early market deployments of alternative
17 technologies and to increase manufacturer volumes and accelerate
18 market acceptance.

19 (5) Projects that support greater commercial motor vehicle and
20 equipment freight efficiency and greenhouse gas emissions
21 reductions, including, but not limited to, advanced intelligent
22 transportation systems, autonomous vehicles, grid integration and
23 integrated storage solutions, charging management demonstration
24 and analytics, and other freight information and operations
25 technologies.

26 (c) The state board, in consultation with the State Energy
27 Resources Conservation and Development Commission, shall
28 develop guidance through the existing Air Quality Improvement
29 Program funding plan process for the implementation of this
30 section that is consistent with the California Global Warming
31 Solutions Act of 2006 (Division 25.5 (commencing with Section
32 38500)) and this chapter.

33 (d) The guidance developed pursuant to subdivision (c) shall
34 do all of the following:

35 (1) Outline performance criteria and metrics for deployment
36 incentives. The goal shall be to design a simple and predictable
37 structure that provides incentives for truck, bus, and off-road
38 vehicle and equipment technologies that provide significant
39 greenhouse gas reduction and air quality benefits.

1 (2) (A) Ensure that program investments are coordinated with
2 funding programs developed pursuant to the California Alternative
3 and Renewable Fuel, Vehicle Technology, Clean Air, and Carbon
4 Reduction Act of 2007 (Chapter 8.9 (commencing with Section
5 44270) of Part 5).

6 (B) The State Energy Resources Conservation and Development
7 Commission shall advise ~~that~~ *the* state board on how to allocate
8 money for vehicle charging infrastructure consistent with the
9 ~~emissions~~² *commission's* investment plan strategies on charging
10 infrastructure.

11 (3) Promote projects that assist the state in reaching its climate
12 goals beyond 2030, consistent with Section 38566.

13 (4) Promote investments in medium- and heavy-duty trucking,
14 including, but not limited to, vocational trucks, short-haul and
15 long-haul trucks, buses, and off-road vehicles and equipment,
16 including, but not limited to, port equipment, agricultural
17 equipment, marine equipment, and rail equipment.

18 (5) Implement purchase incentives for eligible technologies to
19 increase the use of the cleanest vehicles in disadvantaged
20 communities.

21 (6) Allow for remanufactured and retrofitted vehicles to qualify
22 for purchase incentives if those vehicles meet warranty and
23 emissions requirements, as determined by the state board.

24 (7) Establish a competitive process for the allocation of moneys
25 for projects funded pursuant to this section.

26 (8) Leverage, to the maximum extent feasible, federal or private
27 funding.

28 (9) Ensure that the results of emissions reductions or benefits
29 can be measured or quantified.

30 (10) Ensure that activities undertaken pursuant to this section
31 complement, and do not interfere with, efforts to achieve and
32 maintain federal and state ambient air quality standards and to
33 reduce toxic air contaminants.

34 (e) In evaluating potential projects to be funded pursuant to this
35 section, the state board shall give priority to projects that
36 demonstrate one or more of the following characteristics:

37 (1) Benefit disadvantaged communities pursuant to Sections
38 39711 and 39713 or communities with a community emissions
39 reduction program implemented pursuant to Section 44391.2.

40 (2) The ability to leverage additional public and private funding.

1 (3) The potential for cobenefits or multiple-benefit attributes.

2 (4) The potential for the project to be replicated.

3 (5) Regional benefit, with focus on collaboration between
4 multiple entities.

5 (6) Support for technologies with broad market and emissions
6 reduction potential.

7 (7) Support for projects addressing technology and market
8 barriers not addressed by other programs.

9 (8) Support for enabling technologies that benefit multiple
10 technology pathways.

11 (f) In implementing this section, the state board, in consultation
12 with the State Energy Resources Conservation and Development
13 Commission, shall create an annual framework and plan. The
14 framework and plan shall be developed with public input and may
15 utilize existing investment plan processes and workshops as well
16 as existing state and third-party research and technology roadmaps.
17 The framework and plan shall do all of the following:

18 (1) Articulate an overarching vision for technology development,
19 demonstration, precommercial pilot, and early commercial
20 deployments, with a focus on moving technologies through the
21 commercialization process.

22 (2) Outline technology categories and performance criteria for
23 technologies and applications that may be considered for funding
24 pursuant to this section. This shall include technologies for
25 medium- and heavy-duty trucking, including, but not limited to,
26 vocational trucks, short-haul and long-haul trucks, buses, and
27 off-road vehicles and equipment, including, but not limited to, port
28 equipment, agricultural equipment, construction equipment, marine
29 equipment, and rail equipment.

30 (3) Describe the roles of the relevant agencies and the process
31 for coordination.

32 (g) For purposes of this section, “zero- and near-zero-emission”
33 means vehicles, fuels, and related technologies that reduce
34 greenhouse gas emissions and improve air quality when compared
35 with conventional or fully commercialized alternatives, as defined
36 by the state board in consultation with the State Energy Resources
37 Conservation and Development Commission. “Zero- and
38 near-zero-emission” may include, but is not limited to,
39 zero-emission technology, enabling technologies that provide a
40 pathway to emissions reductions, advanced or alternative fuel

1 engines for long-haul trucks, and hybrid or alternative fuel
2 technologies for trucks and off-road equipment.

3 SEC. 2. Section 44272 of the Health and Safety Code is
4 amended to read:

5 44272. (a) The Alternative and Renewable Fuel and Vehicle
6 Technology Program is hereby created. The program shall be
7 administered by the commission. The commission shall implement
8 the program by regulation pursuant to the requirements of Chapter
9 3.5 (commencing with Section 11340) of Part 1 of Division 3 of
10 Title 2 of the Government Code. The program shall provide, upon
11 appropriation by the Legislature, competitive grants, revolving
12 loans, loan guarantees, loans, or other appropriate funding measures
13 to public agencies, vehicle and technology entities, infrastructure
14 entities, businesses and projects, public-private partnerships,
15 workforce training partnerships and collaboratives, fleet owners,
16 consumers, recreational boaters, and academic institutions to
17 develop and deploy innovative technologies that transform
18 California's fuel and vehicle types to help attain the state's climate
19 change policies. The emphasis of this program shall be to develop
20 and deploy technology, infrastructure, and alternative and
21 renewable fuels in the marketplace, without adopting any one
22 preferred fuel or technology.

23 (b) A project that receives more than seventy-five thousand
24 dollars (\$75,000) in funds from the commission shall be approved
25 at a noticed public meeting of the commission and shall be
26 consistent with the priorities established by the investment plan
27 adopted pursuant to Section 44272.5. Under this article, the
28 commission may delegate to the commission's executive director,
29 or his or her designee, the authority to approve either of the
30 following:

31 (1) A contract, grant, loan, or other agreement or award that
32 receives seventy-five thousand dollars (\$75,000) or less in funds
33 from the commission.

34 (2) Amendments to a contract, grant, loan, or other agreement
35 or award as long as the amendments do not increase the amount
36 of the award, change the scope of the project, or modify the purpose
37 of the agreement.

38 (c) The commission shall provide preferences to those projects
39 that maximize the goals of the Alternative and Renewable Fuel

1 and Vehicle Technology Program, based on the following criteria,
2 as applicable:

3 (1) The project's ability to provide a measurable transition from
4 the nearly exclusive use of petroleum fuels to a diverse portfolio
5 of viable alternative fuels that meet petroleum reduction and
6 alternative fuel use goals.

7 (2) The project's consistency with existing and future state
8 climate change policy and low-carbon fuel standards.

9 (3) The project's ability to reduce criteria air pollutants and air
10 toxics and reduce or avoid multimedia environmental impacts.

11 (4) The project's ability to decrease, on a life-cycle basis, the
12 discharge of water pollutants or any other substances known to
13 damage human health or the environment, in comparison to the
14 production and use of California Phase 2 Reformulated Gasoline
15 or diesel fuel produced and sold pursuant to California diesel fuel
16 regulations set forth in Article 2 (commencing with Section 2280)
17 of Chapter 5 of Division 3 of Title 13 of the California Code of
18 Regulations.

19 (5) The project does not adversely impact the sustainability of
20 the state's natural resources, especially state and federal lands.

21 (6) The project provides nonstate matching funds. Costs incurred
22 from the date a proposed award is noticed may be counted as
23 nonstate matching funds. The commission may adopt further
24 requirements for the purposes of this paragraph. The commission
25 is not liable for costs incurred pursuant to this paragraph if the
26 commission does not give final approval for the project or the
27 proposed recipient does not meet requirements adopted by the
28 commission pursuant to this paragraph.

29 (7) The project provides economic benefits for California by
30 promoting California-based technology firms, jobs, and businesses.

31 (8) The project uses existing or proposed fueling infrastructure
32 to maximize the outcome of the project.

33 (9) The project's ability to reduce on a life-cycle assessment
34 greenhouse gas emissions by at least 10 percent, and higher
35 percentages in the future, from current reformulated gasoline and
36 diesel fuel standards established by the state board.

37 (10) The project's use of alternative fuel blends of at least 20
38 percent, and higher blend ratios in the future, with a preference
39 for projects with higher blends.

1 (11) The project drives new technology advancement for
2 vehicles, vessels, engines, and other equipment, and promotes the
3 deployment of that technology in the marketplace.

4 (12) The project’s ability to transition workers to, or promote
5 employment in, the alternative and renewable fuel and vehicle
6 technology sector.

7 (13) The project’s ability to deploy infrastructure not already
8 deployed by other state agencies or utilities, integrate fueling
9 infrastructure and the grid, and match infrastructure to the
10 deployment of advanced light-, medium-, and heavy-duty vehicles.

11 (d) The commission shall rank applications for projects proposed
12 for funding awards based on solicitation criteria developed in
13 accordance with subdivision (c), and shall give additional
14 preference to funding those projects with higher benefit-cost scores.

15 (e) Only the following shall be eligible for funding:

16 (1) Alternative and renewable fuel projects to develop and
17 improve alternative and renewable low-carbon fuels, including
18 electricity, ethanol, dimethyl ether, renewable diesel, natural gas,
19 hydrogen, and biomethane, among others, and their feedstocks
20 that have high potential for long-term or short-term
21 commercialization, including projects that lead to sustainable
22 feedstocks.

23 (2) Demonstration and deployment projects that optimize
24 alternative and renewable fuels for existing and developing engine
25 technologies.

26 (3) Projects to produce alternative and renewable low-carbon
27 fuels in California.

28 (4) Projects to decrease the overall impact of an alternative and
29 renewable fuel’s life-cycle carbon footprint and increase
30 sustainability.

31 (5) Alternative and renewable fuel infrastructure, fueling
32 stations, and equipment. The preference in paragraph (10) of
33 subdivision (c) shall not apply to renewable diesel or biodiesel
34 infrastructure, fueling stations, and equipment used solely for
35 renewable diesel or biodiesel fuel.

36 (6) Projects to develop and improve light-, medium-, and
37 heavy-duty vehicle technologies that provide for better fuel
38 efficiency and lower greenhouse gas emissions, alternative fuel
39 usage and storage, or emission reductions, including propulsion
40 systems, advanced internal combustion engines with a 40 percent

1 or better efficiency level over the current market standard,
2 lightweight materials, intelligent transportation systems, energy
3 storage, control systems and system integration, physical
4 measurement and metering systems and software, development of
5 design standards and testing and certification protocols, battery
6 recycling and reuse, engine and fuel optimization electronic and
7 electrified components, hybrid technology, plug-in hybrid
8 technology, battery electric vehicle technology, fuel cell
9 technology, and conversions of hybrid technology to plug-in
10 technology through the installation of safety certified supplemental
11 battery modules.

12 (7) Programs and projects that accelerate the commercialization
13 of vehicles and alternative and renewable fuels including buy-down
14 programs through near-market and market-path deployments,
15 advanced technology warranty or replacement insurance,
16 development of market niches, supply-chain development, and
17 research related to the pedestrian safety impacts of vehicle
18 technologies and alternative and renewable fuels.

19 (8) Programs and projects to retrofit medium- and heavy-duty
20 onroad and nonroad vehicle fleets with technologies that create
21 higher fuel efficiencies, including alternative and renewable fuel
22 vehicles and technologies, idle management technology, and
23 aerodynamic retrofits that decrease fuel consumption.

24 (9) Infrastructure projects that promote alternative and renewable
25 fuel infrastructure development connected with existing fleets,
26 public transit, and existing transportation corridors, including
27 physical measurement or metering equipment and truck stop
28 electrification.

29 (10) Workforce training programs related to the development
30 and deployment of technologies that transform California's fuel
31 and vehicle types and assist the state in implementing its climate
32 change policies, including, but not limited to, alternative and
33 renewable fuel feedstock production and extraction; renewable
34 fuel production, distribution, transport, and storage;
35 high-performance and low-emission vehicle technology and high
36 tower electronics; automotive computer systems; mass transit fleet
37 conversion, servicing, and maintenance; and other sectors or
38 occupations related to the purposes of this chapter, including
39 training programs to transition dislocated workers affected by the
40 state's greenhouse gas emission policies, including those from

1 fossil fuel sectors, or training programs for low-skilled workers to
2 enter or continue in a career pathway that leads to middle skill,
3 industry-recognized credentials or state-approved apprenticeship
4 opportunities in occupations related to the purposes of this chapter.

5 (11) Block grants or incentive programs administered by public
6 entities or not-for-profit technology entities for multiple projects,
7 education and program promotion within California, and
8 development of alternative and renewable fuel and vehicle
9 technology centers. The commission may adopt guidelines for
10 implementing the block grant or incentive program, which shall
11 be approved at a noticed public meeting of the commission.

12 (12) Life-cycle and multimedia analyses, sustainability and
13 environmental impact evaluations, and market, financial, and
14 technology assessments performed by a state agency to determine
15 the impacts of increasing the use of low-carbon transportation fuels
16 and technologies, and to assist in the preparation of the investment
17 plan and program implementation.

18 (13) A program to provide funding for homeowners who
19 purchase a plug-in electric vehicle to offset costs associated with
20 modifying electrical sources to include a residential plug-in electric
21 vehicle charging station. In establishing this program, the
22 commission shall consider funding criteria to maximize the public
23 benefit of the program.

24 (f) *Not less than 20 percent of funds appropriated for purposes*
25 *of this section shall be allocated for the deployment of medium-*
26 *and heavy-duty electric vehicle infrastructure.*

27 (f)

28 (g) The commission may make a single source or sole source
29 award pursuant to this section for applied research. The same
30 requirements set forth in Section 25620.5 of the Public Resources
31 Code shall apply to awards made on a single source basis or a sole
32 source basis. This subdivision does not authorize the commission
33 to make a single source or sole source award for a project or
34 activity other than for applied research.

35 (g)

36 (h) The commission may do all of the following:

37 (1) Contract with the Treasurer to expend funds through
38 programs implemented by the Treasurer, if the expenditure is
39 consistent with all of the requirements of this article and Article
40 1 (commencing with Section 44270).

- 1 (2) Contract with small business financial development
- 2 corporations established by the Governor’s Office of Business and
- 3 Economic Development to expend funds through the Small
- 4 Business Loan Guarantee Program if the expenditure is consistent
- 5 with all of the requirements of this article and Article 1
- 6 (commencing with Section 44270).
- 7 (3) Advance funds, pursuant to an agreement with the
- 8 commission, to any of the following:
- 9 (A) A public entity.
- 10 (B) A recipient to enable it to make advance payments to a
- 11 public entity that is a subrecipient of the funds and under a binding
- 12 and enforceable subagreement with the recipient.
- 13 (C) An administrator of a block grant program.
- 14 ~~(h)~~
- 15 (i) The commission shall collaborate with entities that have
- 16 expertise in workforce development to implement the workforce
- 17 development components of this section, including, but not limited
- 18 to, the California Workforce Development Board, the Employment
- 19 Training Panel, the Employment Development Department, and
- 20 the Division of Apprenticeship Standards.

SB 1260 (Jackson)
Fire prevention and protection: prescribed burns.

Summary: This bill is an omnibus fire prevention and forestry management bill that will promote long-term forest health and wildfire resiliency. This bill authorizes federal, state, and local agencies to engage in collaborative forestry management, and enhances the Department of Forestry and Fire Protection’s (CAL-FIRE) role in identifying wildfire hazards as local governments plan for new housing and neighborhoods.

Also, in coordination with local air districts, CAL-FIRE and CARB shall develop and fund a program to enhance air quality and smoke monitoring, and provide a public awareness campaign regarding prescribed burns. The program may include purchasing new, year-round air quality monitors. The program shall include adequate funding for local air pollution control and air quality management district participation and implementation costs.

Background: State law establishes CARB as the air pollution control agency in California and requires CARB, among other things, to control emissions from a wide array of mobile sources and implement the CAA. It also establishes local air districts to, among other things, control emissions from stationary sources.

CAL-FIRE, among other things, provides fire protection and prevention, controls pests, and manages and protects forest and range health. Under current law, CAL-FIRE may enter into an agreement, including a grant agreement, for prescribed burning or other hazardous fuel reduction.

In 2017, California experienced the largest and most destructive wildfire season in its history. Nearly 9,000 wildfires ignited across the state, burning 1.2 million acres of land, destroying more than 10,800 structures, and killing at least 44 people. Five of California’s most destructive wildfires on record occurred in 2017, including the Thomas Fire, which is now the largest recorded fire in California history.

Unfortunately, 2017 does not appear to be an abnormality. To the contrary, most of California’s largest wildfires have occurred within the past 30 years. Changing climate patterns have made our state more vulnerable to wildfire, with massive tree die-offs due to years of drought and widespread insect infestations, year-round fire weather conditions, and critical levels of fuels accumulation, all combining to create severe fire risks throughout the state. Indeed, the National Interagency Fire Center’s Predictive Outlook for 2018 is forecasting above normal large fire potential in California due to the persistence of dry fuels, frequent offshore winds, and generally unfavorable weather.

As the Little Hoover Commission concluded in its February 2018 report entitled “Fire on the Mountain: Rethinking Forest Management in the Sierra Nevada,” California’s forests are

reaching a breaking point. Poor management policies that interrupted natural forest lifecycles, combined with climate change, have left our forests vulnerable to catastrophic wildfires.

Status: 5/30/2018 - Read third time. Passed. (Ayes 34. Noes 0.) Ordered to the Assembly.

Specific Provisions: Specifically, this bill would, among other things:

- 1) Require CARB, CAL-FIRE, in coordination with local air districts, to develop and fund a program to enhance air quality and smoke monitoring and to provide a public awareness campaign regarding prescribed burns. The program may include, but not be limited to, purchasing new, year-round air quality monitors. The program shall include adequate funding, upon appropriation by the Legislature, for local air district participation and implementation costs.
- 2) State legislative intent to develop a mechanism to help homeowners remove hazardous trees in areas affected by tree mortality and in high fire hazard severity zones.
- 3) State legislative intent to create a program to help homeowner's self-finance retrofits to their homes to improve resistance to wildfire.
- 4) Amends the liability provision for prescribed fires that escape to provide that a prima facie case of due diligence is established when a prescribed burn is in compliance with all provisions of law and the terms and conditions imposed by an agreement with CAL-FIRE.
- 5) Directs CAL-FIRE to cooperate with private and public landowners in prescribed fire activities including site preparation, preburn planning, and other activities.

Impacts on AQMD's Mission, Operations or Initiatives: This bill is in line with SCAQMD's goals in reducing air pollution from wildfires and protecting public health. The bill would enhance air quality and smoke monitoring and provide a public awareness campaign regarding prescribed burns. The program could include, but would not be limited to, purchasing new air quality monitors and will include adequate funding for local air district program participation and implementation costs.

SUGGESTED AMENDMENTS:

- 1) SCAQMD staff recommends an amendment to clarify that the Air Quality and Prescribed Burns Program created through the bill should include purchasing new, "rapidly deployable air quality monitors" rather than "year-round air quality monitors."
- 2) SCAQMD staff also recommends an amendment to the bill to address an issue that currently complicates the granting of controlled burn permits at the local level. Currently, Section 41812 of the California Health and Safety Code states:

“The air pollution control officer of any district in a county with a population of 6,000,000 or less, upon authorization of the district board, may authorize, by permit, open outdoor fires for the purpose of disposing of agricultural wastes, or wood waste from trees, vines, bushes, or other wood debris free of nonwood materials, in a mechanized burner such that no air contaminant is discharged into the atmosphere for a period or periods aggregating more than 30 minutes in any eight-hour period....”

Unfortunately, this provision prohibits SCAQMD from having the authority to issue controlled burn permits for fire hazard mitigation within Los Angeles County which has a population that exceeds 6,000,000.

Staff would propose an addition to the bill to amend Section 41812 to remove the phrase, “in a county with a population of 6,000,000 or less,” so that SCAQMD would have authority to issue controlled burn permits for fire hazard mitigation within Los Angeles County.

Recommended Position: SUPPORT WITH AMENDMENTS

SUPPORT:

Big Sur Land Trust
California Association of Resource Conservation Districts
County of Ventura
Fire Safe Council of San Diego County
Little Hoover Commission
Nature Conservancy
Pacific Forest Trust
Palomar Mountain Fire Safe Council
San Diego Gas and Electric
Save the Redwoods League
Sierra Forest Legacy
Sonoma County Agricultural Preservation and Open Space District
Sonoma County Water Agency
Southern California Association of Governments
Wildlands Conservancy

OPPOSITION: Unknown.

AMENDED IN SENATE MAY 25, 2018

AMENDED IN SENATE MAY 16, 2018

AMENDED IN SENATE APRIL 9, 2018

SENATE BILL

No. 1260

Introduced by Senator Jackson

February 15, 2018

An act to amend Sections 51179, 65302.5, 65352, and 66474.02 of the Government Code, to amend Sections 13008 and 13055 of the Health and Safety Code, and to amend Sections 4475, 4476, and 4479 of, to amend the heading of Article 2 (commencing with Section 4475) of Chapter 7 of Part 2 of Division 4 of, to add Sections 4114.3, 4482, and 4483 to, to add Article 4 (commencing with Section 4495) to Chapter 7 of Part 2 of Division 4 of, to add and repeal Section 4481 of, to repeal Sections 4475.1, 4475.5, 4478, and 4480 of, and to repeal and add Section 4477 of, the Public Resources Code, relating to fire prevention.

LEGISLATIVE COUNSEL'S DIGEST

SB 1260, as amended, Jackson. Fire prevention and protection: prescribed burns.

(1) Existing law requires a local agency to designate, by ordinance, very high fire hazard severity zones in its jurisdiction, as provided in connection with a state program for fire prevention.

This bill would require the local agency to transmit a copy of the adopted ordinance to the State Board of Forestry and Fire Protection within 30 days of adoption. By imposing a new duty on a local agency, the bill would impose a state-mandated local program.

(2) Existing law requires each planning agency to prepare, and the legislative body of each county and city to adopt, a comprehensive,

long-term general plan, including a safety element, for the physical development of the county or city, as provided. Existing law requires, before a legislative body takes action to adopt or substantially amend a general plan, the planning agency to refer the proposed action to specified entities.

This bill would also require the planning agency to refer the proposed action to the State Board of Forestry and Fire Protection and every local agency that provides fire protection to territory in the city or county, as provided. By requiring a higher level of service from a local agency with respect to the referral of the proposed action, the bill would impose a state-mandated local program.

(3) The Subdivision Map Act vests the authority to regulate and control the design and improvement of subdivisions in the legislative body of a local agency, and sets forth procedures governing the local agency's processing, approval, conditional approval, or disapproval, and filing of tentative, final, and parcel maps, and the modification thereof. The act generally requires a subdivider to file a tentative map or vesting tentative map with the local agency, as specified, and the local agency, in turn, to approve, conditionally approve, or disapprove the map within a specified time period. Before approving a tentative map, or a parcel map for which a tentative map was not required, for an area located in a state responsibility area or a very high fire hazard severity zone, existing law requires the local agency to make specified findings, including that the design and location of each lot in the subdivision and the subdivision as a whole are consistent with any regulations adopted by the State Board of Forestry and Fire Protection relating to buildings or structures in hazardous fire areas or mountainous, forest, brush, and grass-covered lands, as specified.

This bill would instead require a finding that the subdivision is consistent with any regulations adopted by the board relating to buildings or structures in the areas described above. The bill would require the local agency, upon approval of the tentative map in specified situations, to transmit a copy of the findings and maps to the board, thereby imposing a state-mandated local program.

The act also requires the local agency to make a finding that, to the extent practicable, ingress and egress for the subdivision meet regulations regarding road standards for fire equipment access, as provided.

This bill would delete this provision.

(4) Existing law authorizes the Director of Forestry and Fire Protection to enter into an agreement, including a grant agreement, for prescribed burning operations or other hazardous fuel reduction efforts, with either the owner or any other person who has legal control of any property, any public agency with regulatory or natural resource management authority over any property that is included within any wildland, or any nonprofit organization for specified purposes. Existing law provides that a person who allows a fire upon his or her property to escape to the public or private property of another, without exercising due diligence to control the fire, is liable to the owner of the property for the damages to the property caused by the fire.

This bill would provide that compliance with the provisions of law relating to prescribed burning-operation agreements with the director shall constitute prima facie evidence of due diligence with respect to the above provision relating to fire liability. The bill would require the Department of Forestry and Fire Protection to cooperate with private and public landowners in prescribed fire activities, as provided. The bill would require, to the extent feasible, the State Board of Forestry and Fire Protection's Vegetation Treatment Program Programmatic Environmental Impact Report, when certified, to serve as the programmatic environmental document for prescribed burns in the Sierra-Cascade, central coast, and north coast regions of the state, as provided.

Existing law requires any contract entered into pursuant to the above provisions to clearly state the obligations of each party, specify the value assigned, as provided, and specify the total costs of the prescribed burning operation or other hazardous fuel reduction, as provided. Existing law provides that in certain situations, the amount of moneys due to the state shall become a lien upon the property and that any money recovered shall be credited to the department's current support appropriation as a reimbursement. Existing law authorizes the director, in certain circumstances, to enter into an agreement with private consultants or contractors or with other public agencies for furnishing all or a part of the state's share of the responsibility for a burning operation, as provided.

This bill would delete these provisions.

Existing law authorizes the department to purchase 3rd-party liability policy of insurance, as provided. Existing law provides that if the department elects not to purchase insurance, the department shall agree to indemnify and hold harmless the person or public agency contracting

with the department with respect to liability arising out of performance of the contract.

This bill would also give the department the option, if it elects not to purchase insurance, to determine proportionate share of liability, as provided.

The bill would require the agreements described above to provide that the department shall be fully responsible for prescribed burns initiated at the department's request, with the consent of the landowner, for training or other purposes on lands owned by a nonprofit organization or other public agencies.

(5) Existing law authorizes a person, firm, corporation, or a group or combination thereof, that owns or controls brush-covered land, forest land, woodland, grassland, shrubland, or any combination thereof, within a state responsibility area to apply to the Department of Forestry and Fire Protection for permission to utilize prescribed burning operations for specified public purposes. Existing law authorizes various public agencies to use fire to abate fire hazards.

This bill would provide that a person, firm, corporation, or a group or combination thereof, that owns or controls brush-covered land, forest land, woodland, grassland, shrubland, or any combination thereof, within a state responsibility area authorized by the department to utilize prescribed burning operations for specified public purposes is also authorized to use fire to abate a fire hazard. This bill would authorize a person, until January 1, 2039, with a valid fire boss certificate, as provided, to apply for the prescribed burning permit on behalf of the person or entities described above, and would authorize the department, in specified situations, to appoint a burn boss.

The bill would require the department and the State Air Resources Board, in coordination with local air pollution control and air quality management districts, to develop and fund a program, upon appropriation, to enhance air quality and smoke monitoring, and to provide a public awareness campaign regarding prescribed burns, among other things.

(6) Existing law requires the State Fire Marshal to establish a program of fire prevention training for fire prevention inspectors employed by local fire protection agencies.

This bill would require the State Fire Marshal, on or before January 1, 2021, with the involvement of the Statewide Training and Education Advisory Committee, to develop a curriculum, or amend an existing curriculum, for a certification program for fire bosses, as provided.

The bill would require the Department of Forestry and Fire Protection to develop a training program for prescribed fire users to certify professionals in any agency or organization as fire bosses. The bill would require the department to certify these individuals to a common standard.

(7) Existing law requires the Department of Forestry and Fire Protection to do certain things, including, but not limited to, providing fire prevention and firefighting implements and apparatus.

This bill would require the department, by working with specified entities, to enhance the department's education efforts regarding fire prevention and public safety. The bill would authorize the department to establish a grant program, upon appropriation by the Legislature, for these purposes.

(8) Existing law authorizes the state to assume a proportionate share of the costs of site preparation, prescribed burning operations, or other hazardous fuel reduction efforts conducted on wildlands other than wildlands under the jurisdiction of the federal government. Existing law requires the State Board of Forestry and Fire Protection to establish regulations establishing standards to be used by the Director of Forestry and Fire Protection in determining the state's share of the cost. Existing law authorizes the director to accept grants and donations of equipment, materials, or funds from any source for the purpose of supporting or facilitating prescribed burning or other hazardous fuels reduction work, as provided. Existing law authorizes the director to enter into a master agreement with federal land management agencies to conduct joint prescribed burning operations on wild lands and federal lands, as provided.

This bill would delete these provisions.

(9) This bill would make legislative findings and declarations as to the necessity of a special statute for the Sierra-Cascade, central coast, and north coast regions of the state.

(10) 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 with regard to certain mandates no reimbursement is required by this act for a specified reason.

With regard to any other mandates, this bill would provide that, if the Commission on State Mandates determines that the bill contains costs so 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) For millennia, fire has shaped and renewed the ecosystems
4 of California's forest lands. In many parts of the state, historical
5 fire regimes were frequent, with fires occurring as often as every
6 five to 15 years. Some of these fires were naturally ignited by
7 lightning, but fire was also an important tool for Native Americans,
8 who used it to promote the growth of certain plants they relied on
9 for food, medicine, and materials to make baskets, string, and
10 shelter, and which limited the build-up of fuels in forest lands.

11 (b) For more than a century, states and the federal government
12 have adopted fire suppression policies that have resulted in high
13 fuel accumulations and significant ecological impacts on forest
14 lands. This has been reflected in the increasingly severe fire seasons
15 in recent years with more acres burned at high intensity, increased
16 numbers of large-scale catastrophic fires, significant carbon dioxide
17 and other emissions, problematic and dangerous containment and
18 suppression efforts, increased financial costs, and reductions in
19 resiliency and biodiversity of California's fire-adapted ecosystems.
20 In addition, implementation of fire suppression policies has
21 impacted tribal communities throughout the state, and continues
22 to threaten cultural resources, practices, ceremonies, and cultural
23 identity.

24 (c) The 2013 Rim Fire demonstrated the dangers and cost of
25 high fuel accumulations on forest lands. The Rim Fire burned more
26 than 250,000 acres over a period of 69 days, caused at least
27 hundreds of millions of dollars in economic and environmental
28 damage, destroyed significant habitats for a number of California's
29 rarest animals, blanketed large swaths of northern California and
30 northern Nevada with thick smoke impacting 7 million people per
31 day with poor air quality, threatened reservoirs, such as Hetch
32 Hetchy, and demanded more than \$125 million in firefighting
33 costs. The fire caused the Governor to declare states of emergency
34 in the Counties of Mariposa, San Francisco, and Tuolumne, and
35 the President of the United States to make a major disaster

1 declaration. According to federal forest ecologists, the Rim Fire’s
2 exponential growth was tied to a century’s worth of fuel left behind
3 due to historic policies of fire suppression and fire exclusion. The
4 lack of fire over the years had led to overgrown and unhealthy
5 forests. In fact, the fire slowed only after hitting areas that had
6 burned in the past two decades due to prescribed and natural burns.

7 (d) Many states and the federal government have been taking
8 measures to increase the use of prescribed burning as a vegetation
9 management tool to reduce the naturally occurring buildup of
10 vegetative fuels on forest lands, thereby reducing the risk and
11 severity of wildfires and lessening the loss of life and property.
12 The United States Fish and Wildlife Service, Bureau of Indian
13 Affairs, National Park Service, United States Forest Service, United
14 States Bureau of Land Management, and United States Fire
15 Administration are part of an interagency strategy that has adopted
16 direction and guidance for prescribed burn planning and
17 implementation. These agencies have created a formal prescribed
18 fire plan template as part of this effort. Moreover, several states
19 have laws that promote prescribed burning, and approximately
20 one-half of the states in the country have prescribed fire councils.

21 (e) Prescribed burning is recognized as an important tool in the
22 Department of Forestry and Fire Protection’s 2010 Strategic Fire
23 Plan for California. This plan includes the objective of increasing
24 “public education and awareness in support of ecologically
25 sensitive and economically efficient vegetation management
26 activities, including prescribed fire, forest thinning and other fuels
27 treatment projects.”

28 (f) In addition to reducing the frequency and severity of
29 wildfires, prescribed burning of forest lands helps to prepare sites
30 for replanting and natural seeding, to control insects and diseases,
31 and to increase productivity. It is also an important tool for
32 increasing the fire resilience and heterogeneity of California’s
33 diverse landscapes, and for creating, restoring, and maintaining
34 critical habitats, resources, and ecosystem services. Importantly,
35 prescribed burning also supports public health by reducing
36 emissions associated with more catastrophic wildfires.

37 (g) Prescribed burning is often the most cost-effective, efficient
38 fuel treatment option for forest lands. This is especially true in
39 areas dominated by steep terrain or lack of vehicular access. In
40 some circumstances, costs may be a challenge when preburn

1 thinning is required to avoid fire escape during burns. In California,
2 some of these costs may be offset through existing timber harvest
3 permit exemptions (for example, the Forest Fire Prevention Pilot
4 Project Exemption) that allow landowners to harvest timber to
5 offset the cost of thinning or burning.

6 (h) While prescribed burning inherently creates wood smoke,
7 this smoke pales in comparison to the air quality issues created by
8 catastrophic wildfires. Therefore, by reducing the threat of
9 catastrophic wildfires, prescribed burning can have net air quality
10 benefits that are significant to protecting public health.

11 (i) California needs to develop a training curriculum for
12 firefighters to become proficient in prescribed fire and should use
13 certified professionals as fire bosses even while the training
14 curriculum is enhanced.

15 (j) Forest ecosystems are crucial for absorbing and storing
16 atmospheric carbon; however, catastrophic wildfires impede the
17 forest's ability to sequester carbon. Accelerating the pace and scale
18 of prefire treatments, such as prescribed fire, promises to help
19 modify future wildfire impacts and thus protect our forests' ability
20 to sequester carbon.

21 (k) Though prescribed burning is widely recognized as an
22 effective, powerful management tool, it is complex in nature and
23 highly regulated. Despite the fact that prescribed fire is often the
24 only option in portions of California, successful implementation
25 of prescribed burning requires careful planning, specific weather
26 conditions, qualified crews, funding, public support, and
27 compliance with various laws and regulations. These variables can
28 make it difficult for managers to utilize prescribed burning.

29 (l) To limit the threat of catastrophic wildfires and to improve
30 forest health, it is a priority of the state to have an effective
31 prescribed burning program that is developed collaboratively with
32 federal agencies and crafted by prescribed burning experts at state
33 public universities, public agencies, nonprofit entities, private
34 landowners, and other relevant organizations. It is also a priority
35 of the state that a prescribed burning program should assist forest
36 landowners in exercising due diligence to control prescribed
37 burning so as to prevent fire escape. By promoting due diligence,
38 the state will be protecting the public, reducing the risk of
39 landowner liability, and taking steps to encourage more responsible
40 prescribed burning.

1 (m) Considerable expertise exists in universities, resource
2 conservation districts, fire safe councils, and other entities that
3 should be employed more widely and more strategically to provide
4 nonregulatory information to property owners, homeowners, and
5 local governments. This information could relate to defensible
6 space around homes, restoring prescribed fires on a regularized
7 basis to the landscape, information about smoke monitoring from
8 prescribed fires, hardening residences to improve resistance to
9 wildfires, evacuation routes, land management that improves fire
10 resiliency or carbon sequestration, and activities or programs that
11 improve public safety, among other things.

12 SEC. 2. It is the intent of the Legislature to enact legislation
13 that would fund the removal of dead trees that may cause a public
14 safety concern from private homes in areas affected by tree
15 mortality and in high fire hazard severity zones. This may be
16 undertaken in conjunction with local governments, resource
17 conservation districts, and fire safe councils. It is not the intent
18 that this change the responsibility of homeowners to undertake
19 defensible space measures as required by state law and many local
20 ordinances. This incentive to homeowners should be accompanied
21 with greater enforcement of defensible space requirements.

22 SEC. 3. It is the intent of the Legislature to enact legislation
23 to create a cost-share program, a revolving loan program, or a
24 subordinate debt financing mechanism to help homeowners,
25 especially those with limited incomes, who live in high fire hazard
26 zones, state responsibility areas, or areas in which there is a high
27 degree of tree mortality, to retrofit their homes to improve
28 resistance to wildfire. Eligible improvements would include, but
29 would not be limited to, retrofitting windows, vents, soffits, eaves,
30 roofs, decks, and other structural components of a structure. These
31 improvements would be cost effective in that not only would the
32 structures become more fire resistant, but the state's fire
33 suppression costs may be reduced significantly, including the
34 potential elimination of the need to put a fire engine in the driveway
35 of the houses that have been retrofitted. It is the intent that
36 retrofitting pursuant to this section would occur on all structures
37 in the state, including those within homeowners' associations.

38 SEC. 4. Section 51179 of the Government Code is amended
39 to read:

1 51179. (a) A local agency shall designate, by ordinance, very
2 high fire hazard severity zones in its jurisdiction within 120 days
3 of receiving recommendations from the director pursuant to
4 subdivisions (b) and (c) of Section 51178. The local agency shall
5 transmit a copy of the adopted ordinance to the State Board of
6 Forestry and Fire Protection within 30 days of adoption. A local
7 agency shall be exempt from these requirements if ordinances of
8 the local agency, adopted on or before December 31, 1992, impose
9 standards that are equivalent to, or more restrictive than, the
10 standards imposed by this chapter.

11 (b) A local agency may, at its discretion, exclude from the
12 requirements of Section 51182 an area identified as a very high
13 fire hazard severity zone by the director within the jurisdiction of
14 the local agency, following a finding supported by substantial
15 evidence in the record that the requirements of Section 51182 are
16 not necessary for effective fire protection within the area.

17 (c) A local agency may, at its discretion, include areas within
18 the jurisdiction of the local agency, not identified as very high fire
19 hazard severity zones by the director, as very high fire hazard
20 severity zones following a finding supported by substantial
21 evidence in the record that the requirements of Section 51182 are
22 necessary for effective fire protection within the area.

23 (d) Changes made by a local agency to the recommendations
24 made by the director shall be final and shall not be rebuttable by
25 the director.

26 (e) The State Fire Marshal shall prepare and adopt a model
27 ordinance that provides for the establishment of very high fire
28 hazard severity zones.

29 (f) Any ordinance adopted by a local agency pursuant to this
30 section that substantially conforms to the model ordinance of the
31 State Fire Marshal shall be presumed to be in compliance with the
32 requirements of this section.

33 (g) A local agency shall post a notice at the office of the county
34 recorder, county assessor, and county planning agency identifying
35 the location of the map provided by the director pursuant to Section
36 51178. If the agency amends the map, pursuant to subdivision (b)
37 or (c) of this section, the notice shall instead identify the location
38 of the amended map.

39 SEC. 5. Section 65302.5 of the Government Code is amended
40 to read:

1 65302.5. (a) At least 45 days prior to adoption or amendment
2 of the safety element, each county and city shall submit to the
3 California Geological Survey of the Department of Conservation
4 one copy of a draft of the safety element or amendment and any
5 technical studies used for developing the safety element. The
6 division may review drafts submitted to it to determine whether
7 they incorporate known seismic and other geologic hazard
8 information, and report its findings to the planning agency within
9 30 days of receipt of the draft of the safety element or amendment
10 pursuant to this subdivision. The legislative body shall consider
11 the division's findings prior to final adoption of the safety element
12 or amendment unless the division's findings are not available
13 within the above prescribed time limits or unless the division has
14 indicated to the city or county that the division will not review the
15 safety element. If the division's findings are not available within
16 those prescribed time limits, the legislative body may take the
17 division's findings into consideration at the time it considers future
18 amendments to the safety element. Each county and city shall
19 provide the division with a copy of its adopted safety element or
20 amendments. The division may review adopted safety elements
21 or amendments and report its findings. All findings made by the
22 division shall be advisory to the planning agency and legislative
23 body.

24 (b) (1) The draft element of or draft amendment to the safety
25 element of a county or a city's general plan shall be submitted to
26 the State Board of Forestry and Fire Protection and to every local
27 agency that provides fire protection to territory in the city or county
28 at least 90 days prior to either of the following:

29 (A) The adoption or amendment to the safety element of its
30 general plan for each county that contains state responsibility areas.

31 (B) The adoption or amendment to the safety element of its
32 general plan for each city or county that contains a very high fire
33 hazard severity zone as defined pursuant to subdivision (i) of
34 Section 51177.

35 (2) The State Board of Forestry and Fire Protection shall, and
36 a local agency may, review the draft or an existing safety element
37 and recommend changes to the planning agency within 60 days
38 of its receipt regarding both of the following:

39 (A) Uses of land and policies in state responsibility areas and
40 very high fire hazard severity zones that will protect life, property,

1 and natural resources from unreasonable risks associated with
2 wildland fires.

3 (B) Methods and strategies for wildland fire risk reduction and
4 prevention within state responsibility areas and very high fire
5 hazard severity zones.

6 (3) Prior to the adoption of its draft element or draft amendment,
7 the board of supervisors of the county or the city council of a city
8 shall consider the recommendations, if any, made by the State
9 Board of Forestry and Fire Protection and any local agency that
10 provides fire protection to territory in the city or county. If the
11 board of supervisors or city council determines not to accept all
12 or some of the recommendations, if any, made by the State Board
13 of Forestry and Fire Protection or local agency, the board of
14 supervisors or city council shall communicate in writing to the
15 State Board of Forestry and Fire Protection or the local agency,
16 its reasons for not accepting the recommendations.

17 (4) If the State Board of Forestry and Fire Protection’s or local
18 agency’s recommendations are not available within the time limits
19 required by this section, the board of supervisors or city council
20 may act without those recommendations. The board of supervisors
21 or city council shall take the recommendations into consideration
22 the next time it considers amendments to the safety element.

23 SEC. 6. Section 65352 of the Government Code is amended
24 to read:

25 65352. (a) Before a legislative body takes action to adopt or
26 substantially amend a general plan, the planning agency shall refer
27 the proposed action to all of the following entities:

28 (1) A city or county, within or abutting the area covered by the
29 proposal, and any special district that may be significantly affected
30 by the proposed action, as determined by the planning agency.

31 (2) An elementary, high school, or unified school district within
32 the area covered by the proposed action.

33 (3) The local agency formation commission.

34 (4) An areawide planning agency whose operations may be
35 significantly affected by the proposed action, as determined by the
36 planning agency.

37 (5) A federal agency, if its operations or lands within its
38 jurisdiction may be significantly affected by the proposed action,
39 as determined by the planning agency.

1 (6) (A) The branches of the United States Armed Forces that
2 have provided the Office of Planning and Research with a
3 California mailing address pursuant to subdivision (d) of Section
4 65944, if the proposed action is within 1,000 feet of a military
5 installation, or lies within special use airspace, or beneath a
6 low-level flight path, as defined in Section 21098 of the Public
7 Resources Code, and if the United States Department of Defense
8 provides electronic maps of low-level flight paths, special use
9 airspace, and military installations at a scale and in an electronic
10 format that is acceptable to the Office of Planning and Research.

11 (B) Within 30 days of a determination by the Office of Planning
12 and Research that the information provided by the Department of
13 Defense is sufficient and in an acceptable scale and format, the
14 office shall notify cities, counties, and cities and counties of the
15 availability of the information on the Internet. Cities, counties, and
16 cities and counties shall comply with subparagraph (A) within 30
17 days of receiving this notice from the office.

18 (7) A public water system, as defined in Section 116275 of the
19 Health and Safety Code, with 3,000 or more service connections,
20 that serves water to customers within the area covered by the
21 proposal. The public water system shall have at least 45 days to
22 comment on the proposed plan, in accordance with subdivision
23 (b), and to provide the planning agency with the information set
24 forth in Section 65352.5.

25 (8) Any groundwater sustainability agency that has adopted a
26 groundwater sustainability plan pursuant to Part 2.74 (commencing
27 with Section 10720) of Division 6 of the Water Code or local
28 agency that otherwise manages groundwater pursuant to other
29 provisions of law or a court order, judgment, or decree within the
30 planning area of the proposed general plan.

31 (9) The State Water Resources Control Board, if it has adopted
32 an interim plan pursuant to Chapter 11 (commencing with Section
33 10735) of Part 2.74 of Division 6 of the Water Code that includes
34 territory within the planning area of the proposed general plan.

35 (10) The Bay Area Air Quality Management District for a
36 proposed action within the boundaries of the district.

37 (11) A California Native American tribe that is on the contact
38 list maintained by the Native American Heritage Commission and
39 that has traditional lands located within the city's or county's
40 jurisdiction.

1 (12) The Central Valley Flood Protection Board for a proposed
2 action within the boundaries of the Sacramento and San Joaquin
3 Drainage District, as set forth in Section 8501 of the Water Code.

4 (13) (A) The State Board of Forestry and Fire Protection and
5 every local agency that provides fire protection to territory in the
6 city or county, if the proposed action includes either of the
7 following:

8 (i) The adoption or amendment of the safety element of its
9 general plan for any county that contains a state responsibility
10 area.

11 (ii) The adoption or amendment of the safety element of its
12 general plan for any city or county that contains a very high fire
13 hazard severity zone, as defined in subdivision (i) of Section 51177.

14 (B) A referral made pursuant to this paragraph shall be made
15 no later than the date on which the county or city sends notice of
16 preparation pursuant to Section 21080.4 of the Public Resources
17 Code, if any, for the project.

18 (b) An entity receiving a proposed general plan or amendment
19 of a general plan pursuant to this section shall have 45 days from
20 the date the referring agency mails it or delivers it to comment
21 unless a longer period is specified by the planning agency.

22 (c) (1) This section is directory, not mandatory, and the failure
23 to refer a proposed action to the entities specified in this section
24 does not affect the validity of the action, if adopted.

25 (2) To the extent that the requirements of this section conflict
26 with the requirements of Chapter 4.4 (commencing with Section
27 65919), the requirements of Chapter 4.4 shall prevail.

28 SEC. 7. Section 66474.02 of the Government Code is amended
29 to read:

30 66474.02. (a) Before approving a tentative map, or a parcel
31 map for which a tentative map was not required, for an area located
32 in a state responsibility area or a very high fire hazard severity
33 zone, as both are defined in Section 51177, a legislative body of
34 a county shall, except as provided in subdivision (b), make the
35 following three findings:

36 (1) A finding supported by substantial evidence in the record
37 that the subdivision is consistent with applicable regulations
38 adopted by the State Board of Forestry and Fire Protection pursuant
39 to Sections 4290 and 4291 of the Public Resources Code.

1 (2) A finding supported by substantial evidence in the record
2 that structural fire protection and suppression services will be
3 available for the subdivision through any of the following entities:

4 (A) A county, city, special district, political subdivision of the
5 state, or another entity organized solely to provide fire protection
6 services that is monitored and funded by a county or other public
7 entity.

8 (B) The Department of Forestry and Fire Protection by contract
9 entered into pursuant to Section 4133, 4142, or 4144 of the Public
10 Resources Code.

11 (3) Upon approving a tentative map, or a parcel map for which
12 a tentative map was not required, for an area located in a state
13 responsibility area or a very high fire hazard severity zone, as both
14 are defined in Section 51177, a legislative body of a county shall
15 transmit a copy of the findings required in this subdivision and
16 accompanying maps to the State Board of Forestry and Fire
17 Protection.

18 (b) (1) Subdivision (a) does not apply to the approval of a
19 tentative map, or a parcel map for which a tentative map was not
20 required, that would subdivide land identified in the open space
21 element of the general plan for the managed production of
22 resources, including, but not limited to, forest land, rangeland,
23 agricultural land, and areas of economic importance for the
24 production of food or fiber, if the subdivision is consistent with
25 the open space purpose and if, for the subdivision of land that
26 would result in parcels that are 40 acres or smaller in size, those
27 parcels are subject to a binding and recorded restriction prohibiting
28 the development of a habitable, industrial, or commercial building
29 or structure. All other structures shall comply with defensible space
30 requirements described in Section 51182 of this code or Sections
31 4290 and 4291 of the Public Resources Code.

32 (2) Any later approval to remove a binding restriction placed
33 as a condition of a tentative map, or a parcel map for which a
34 tentative map was not required, that would allow the development
35 of a building or structure for a parcel that has previously been
36 exempted from the requirements of subdivision (a) pursuant to
37 paragraph (1) of this subdivision shall be subject to the
38 requirements of subdivision (a).

39 (c) This section does not supersede regulations established by
40 the State Board of Forestry and Fire Protection or local ordinances

1 that provide equivalent or more stringent minimum requirements
2 than those contained within this section.

3 SEC. 8. Section 13008 of the Health and Safety Code is
4 amended to read:

5 13008. (a) A person who allows a fire burning upon his or her
6 property to escape to the property of another, whether privately or
7 publicly owned, without exercising due diligence to control the
8 fire, is liable to the owner of the property for the damages to the
9 property caused by the fire.

10 (b) Compliance with an agreement entered into pursuant to
11 Article 2 (commencing with Section 4475) of Chapter 7 of Part 2
12 of Division 4 of the Public Resources Code shall constitute prima
13 facie evidence of due diligence.

14 SEC. 9. Section 13055 of the Health and Safety Code is
15 amended to read:

16 13055. A public agency authorized to engage in fire protection
17 activities, including, but not limited to, a fire protection district,
18 city, city and county, or county fire department, the Department
19 of Forestry and Fire Protection, and the United States Forest
20 Service, or a person authorized pursuant to Article 3 (commencing
21 with Section 4491) of the Public Resources Code, may use fire to
22 abate a fire hazard.

23 SEC. 10. Section 4114.3 is added to the Public Resources Code,
24 to read:

25 4114.3. The department shall actively engage University of
26 California Extension Services, fire safe councils, resource
27 conservation districts, and any other entity with demonstrated
28 expertise to enhance its public education efforts regarding fire
29 prevention and public safety. These public education efforts shall
30 include, but are not limited to, educational activities regarding
31 community wildfire protection plans, community fire safe councils,
32 community and private chipping days, defensible space, prescribed
33 fires, hardened residences, compliance with building standards,
34 evacuation routes, activities that promote fire resiliency or achieve
35 carbon-sequestration benefits in the wildland-urban interface and
36 other forest lands, and activities that promote public safety. For
37 purposes of this section, the department shall establish a grant
38 program, upon appropriation by the Legislature, which may include
39 a cost-share program with local government.

1 SEC. 11. The heading of Article 2 (commencing with Section
2 4475) of Chapter 7 of Part 2 of Division 4 of the Public Resources
3 Code is amended to read:

4

5 Article 2. Department of Forestry Burning Agreements

6

7 SEC. 12. Section 4475 of the Public Resources Code is
8 amended to read:

9 4475. (a) The director may enter into an agreement, including
10 a grant agreement, for prescribed burning or other hazardous fuel
11 reduction that is consistent with this chapter and the regulations
12 of the board with either the owner or any other person who has
13 legal control of any property, any public agency with regulatory
14 or natural resource management authority over any property,
15 including the federal government, that is included within any
16 wildland, or any nonprofit organization for any of the following
17 purposes, or any combination of those purposes:

18 (1) Prevention of high-intensity wildland fires through reduction
19 of the volume and continuity of wildland fuels.

20 (2) Watershed management.

21 (3) Range improvement.

22 (4) Vegetation management.

23 (5) Forest improvement.

24 (6) Wildlife habitat improvement.

25 (7) Air quality maintenance.

26 (b) An agreement shall not be entered into pursuant to this
27 section unless the director determines that the public benefits
28 estimated to be derived from the prescribed burning or other
29 hazardous fuel reduction pursuant to the agreement will be equal
30 to or greater than the foreseeable damage that could result from
31 the prescribed burning or other hazardous fuel reduction.

32 SEC. 13. Section 4475.1 of the Public Resources Code is
33 repealed.

34 SEC. 14. Section 4475.5 of the Public Resources Code is
35 repealed.

36 SEC. 15. Section 4476 of the Public Resources Code is
37 amended to read:

38 4476. An agreement that is entered into pursuant to this article
39 shall do all of the following:

1 (a) Vest in the director the final authority to determine the time
2 during which wildland fuel and structural fire hazards may be
3 burned to minimize the risk of escape of a fire set in a prescribed
4 burning operation and to facilitate maintenance of air quality.

5 (b) Except as provided in subdivision (b) of Section 4481,
6 designate an officer of the department as the fire boss with final
7 authority to approve and amend the plan and formula applicable
8 to a prescribed burning operation, to determine that the site has
9 been prepared and the crew and equipment are ready to commence
10 the operation, and to supervise the work assignments of
11 departmental employees and all personnel furnished by the person
12 contracting with the department until the prescribed burning is
13 completed and all fire is declared to be out.

14 (c) Specify the duties of, and the precautions taken by, the
15 person contracting with the department and any personnel furnished
16 by that person.

17 (d) Provide that any personnel furnished by a person contracting
18 with the department to assist in any aspect of site preparation or
19 prescribed burning or other hazardous fuel reduction shall be an
20 agent of that person for all purposes of workers' compensation.
21 However, any volunteer recruited or used by the department to
22 suppress a wildland fire originating or spreading from a prescribed
23 burning operation is an employee of the department for all purposes
24 of workers' compensation.

25 (e) Provide that the department may, in its discretion, purchase
26 a third-party liability policy of insurance that provides coverage
27 against loss resulting from a wildland fire sustained by any person
28 or public agency, including the federal government. The amount
29 of the policy, if purchased, shall be determined by the director.
30 The policy shall name the person contracting with the department
31 and the department as joint policyholders. A certificate of
32 insurance, if purchased, covering each policy shall be attached to
33 or become a part of the agreements. If the department elects not
34 to purchase insurance, the department shall either (1) agree to
35 indemnify and hold harmless the person or public agency
36 contracting with the department with respect to liability arising
37 out of performance of the agreement or (2) in the agreement,
38 provide for the proportionate share of liability between the
39 department and the person or public agency contracting with the

1 department with respect to potential liability arising out of
2 performance of the agreement.

3 (f) Provide that the department shall be fully responsible for
4 prescribed burns initiated at the department's request, with the
5 consent of the landowner, for training or other purposes on lands
6 owned by a nonprofit organization or other public agencies.

7 SEC. 16. Section 4477 of the Public Resources Code is
8 repealed.

9 SEC. 17. Section 4477 is added to the Public Resources Code,
10 to read:

11 4477. (a) On or before January 1, 2021, the State Fire Marshal,
12 with the involvement of the Statewide Training and Education
13 Advisory Committee, shall develop a curriculum for, or amend
14 into in an existing curriculum, a certification program for fire
15 bosses, who, pursuant to Section 4476, possess authority to engage
16 in a prescribed burning operation and to enter into the necessary
17 contracts related to a prescribed burning operation. The curriculum
18 shall provide for the initial certification as well as the continuing
19 education of fire bosses. It is the intent of the Legislature that this
20 curriculum become a regular part of the training of firefighters
21 conducted by the Department of Forestry and Fire Protection and
22 all other appropriate accredited training providers.

23 (b) In addition to the curriculum and certification program
24 developed pursuant to subdivision (a), the department shall develop
25 a training program for prescribed fire users to certify professionals
26 in any agency or organization as fire bosses. The department shall
27 certify these individuals to a common standard. It is the intent of
28 the Legislature that the department use its discretion to ensure that
29 fire bosses are thoroughly qualified to engage in prescribed burning
30 operations prior to issuing certifications.

31 SEC. 18. Section 4478 of the Public Resources Code is
32 repealed.

33 SEC. 19. Section 4479 of the Public Resources Code is
34 amended to read:

35 4479. Liability for any costs incurred by the department in
36 suppressing any wildland fire originating or spreading from a
37 prescribed burning operation conducted pursuant to an agreement
38 entered into pursuant to this article shall be governed by
39 subdivision (b) of Section 13009 of the Health and Safety Code.

1 SEC. 20. Section 4480 of the Public Resources Code is
2 repealed.

3 SEC. 21. Section 4481 is added to the Public Resources Code,
4 to read:

5 4481. (a) A person possessing a valid fire boss certification
6 as approved by the California Incident Command Certification
7 System or the National Wildlife Coordinating Group may apply
8 for a permit pursuant to Section 4492 on behalf of a person or
9 entity listed in Section 4492.

10 (b) The director may appoint a fire boss with valid fire boss
11 certification, as described in subdivision (a), who is not an officer
12 of the department, for purposes of subdivision (b) of Section 4476.

13 (c) For purposes of this article, the terms “burn boss” and “fire
14 boss” are interchangeable.

15 (d) This section shall remain in effect only until January 1, 2039,
16 and as of that date is repealed.

17 SEC. 22. Section 4482 is added to the Public Resources Code,
18 to read:

19 4482. The department shall cooperate with private and public
20 landowners in prescribed fire activities including, but not limited
21 to, site preparation, and other preburn planning and activities. To
22 the extent feasible, the department shall also schedule its personnel,
23 including seasonal staff, to provide all appropriate services to assist
24 in prescribed burning operations. These activities shall utilize the
25 California Conservation Corps, local conservation corps, and
26 California minimum-custody inmates. The department may
27 consider establishing one or more separate units to assist with
28 annual prescribed burning operations. The department’s funding
29 for prescribed fires shall come from existing resources, and shall
30 not diminish the department’s fire suppression activities.

31 SEC. 23. Section 4483 is added to the Public Resources Code,
32 to read:

33 4483. (a) To the extent feasible, the board’s Vegetation
34 Treatment Program Programmatic Environmental Impact Report,
35 when certified, shall serve as the programmatic environmental
36 document for prescribed fires initiated by the department or by a
37 third party for a public purpose pursuant to Section 4491.

38 (b) The application of subdivision (a) shall be limited to
39 prescribed fires that occur in the Sierra-Cascade, central coast, and
40 north coast regions of the state.

1 (c) It is the intent of the Legislature that this section alleviate
2 the need for each prescribed fire project to independently comply
3 with the California Environmental Quality Act (Division 13
4 (commencing with Section 21050)), and instead only require
5 analysis and mitigation of those environmental impacts not
6 analyzed or mitigated in the programmatic environmental document
7 described in subdivision (a).

8 SEC. 24. Article 4 (commencing with Section 4495) is added
9 to Chapter 7 of Part 2 of Division 4 of the Public Resources Code,
10 to read:

11
12 Article 4. Air Quality and Prescribed Burns Program

13
14 4495. ~~(a)~~—In coordination with local air pollution control and
15 air quality management districts, the department and the State Air
16 Resources Board shall develop and fund a program, upon
17 appropriation by the Legislature, to enhance air quality and smoke
18 monitoring, and to provide a public awareness campaign regarding
19 prescribed burns. The program may include, but not be limited to,
20 purchasing new, year-round air quality monitors. The program
21 shall include adequate funding, upon appropriation by the
22 Legislature, for local air pollution control and air quality
23 management district participation and implementation costs.

24 ~~(b) The State Air Resources Board shall ensure that, to the~~
25 ~~maximum extent practicable, local air pollution control and air~~
26 ~~quality management districts are engaged and invited to participate~~
27 ~~in the development of the program pursuant to this section and~~
28 ~~that the funding needs of these local districts to implement this~~
29 ~~program are addressed.~~

30 SEC. 25. The Legislature finds and declares that a special
31 statute, pursuant to Section ~~22~~ 23 of this act, is necessary and that
32 a general statute cannot be made applicable within the meaning
33 of Section 13 of Article IV of the California Constitution because
34 of the unique urgency in the Sierra-Cascade, central coast, and
35 north coast regions relating to their wildfire risk due to tree
36 mortality issues affecting the regions.

37 SEC. 26. No reimbursement is required by this act pursuant to
38 Section 6 of Article XIII B of the California Constitution because
39 a local agency or school district has the authority to levy service
40 charges, fees, or assessments sufficient to pay for the program or

1 level of service mandated by this act, within the meaning of Section
2 17556 of the Government Code.
3 However, if the Commission on State Mandates determines that
4 this act contains other costs mandated by the state, reimbursement
5 to local agencies and school districts for those costs shall be made
6 pursuant to Part 7 (commencing with Section 17500) of Division
7 4 of Title 2 of the Government Code.

O

BOARD MEETING DATE: July 6, 2018

AGENDA NO. 20

REPORT: Refinery Committee

SYNOPSIS: The Refinery Committee held a meeting on Saturday, April 28, 2018 in Torrance concerning an update on the development of Proposed Rule 1410 - Hydrogen Fluoride Storage and Use at Petroleum Refineries. The following is a summary of the meeting.

RECOMMENDED ACTION:
Receive and File.

Clark E. Parker, Sr., Chair
Refinery Committee

PF:SN::MK:JHL

Committee Members

Present: Dr. Clark E. Parker, Sr./Chair, Mayor Larry McCallon/Vice Chair, Dr. Joseph Lyou and Mayor Pro Tem Judith Mitchell. Dr. William A. Burke was named an Ad Hoc member of the committee for this meeting.

Absent: Mayor Ben Benoit

Call to Order

Chairman Parker called the meeting to order at 9:05 a.m.

Welcome/Opening Remarks

Dr. Parker introduced the Refinery Committee members, summarized the past two Refinery Committee meetings held on April 1, 2017 and January 20, 2018 and his meetings with representatives from Valero, the Torrance Refining Company (TORC) and Torrance Refinery Action Alliance (TRAA) since the last Refinery Committee meeting. He explained that the 2015 explosion at Mobil Refinery and the repeated events in 2016, including fires, power outages, and increased flaring, brought the safety issue of modified hydrogen fluoride (MHF) to the attention of the SCAQMD. He expressed his concern about public health and safety that even refineries with the highest safety designations can have accidents and referenced, for example, the recent accident at Valero Refinery in Texas City.

Overview

Executive Officer Wayne Nastri provided an overview of the meeting's agenda and encouraged additional public participation in the ongoing rule development process.

Torrance Mayor Pat Furey encouraged active public participation and strongly encouraged the Refinery Committee members to resolve this matter as soon as possible.

Dr. Philip Fine, Deputy Executive Officer/Planning, Rule Development and Area Sources, summarized staff's continuing efforts to work with key stakeholders to reach consensus since the January 20 Refinery Committee meeting, pursuant to the Committee's direction. Dr. Fine presented key issues and staff responses regarding the availability of emerging technologies and explained that sulfuric acid alkylation is currently available commercially, but that there was a lack of return on investment for conversion to sulfuric acid. Dr. Fine explained that in addition to capital and operating costs, the public safety and health effects should be part of the consideration to phase out MHF. In addition, staff believes Torrance Refining Company's cost study of the conversion to sulfuric acid was overestimated due to the extra equipment proposed to be modified, and that the analysis did not take into account any potential benefits from the New Tax Cut and Jobs Act. A key issue raised by the refineries is that regulating only two refineries could provide a market advantage to other refineries and could affect gasoline prices. Dr. Fine explained that a pre-planned phase-out would be less disruptive than an unplanned shutdown and that the state's projection for a future decrease in gasoline demand would minimize potential supply and cost impacts.

Dr. Fine also presented the risks posed by TORC and Valero given that they are two of the top three hydrogen fluoride (HF) or MHF refineries in the U.S. in terms of location in densely populated areas. Dr. Fine emphasized that MHF exposure has the same health effects as HF exposure and although MHF modestly increases rainout, HF exposure could still occur.

Dr. Fine stated that the refineries and TRAA have said they cannot support an initial rule concept with an 8-year time frame for phase-out or Tier III mitigation. He presented the staff recommendation for two potential rule approaches. Option A requires Tier I mitigation implemented within one year of rule adoption and phase-out of MHF in no longer than five years. Option B requires Tier I mitigation and Tier II mitigation within three years of adoption and phase-out of MHF usage within 6 years after rule adoption. A technology assessment could be conducted in two years to evaluate the progress of the emerging technologies. If the assessment concludes that additional time is needed, Option B would require phase-out no longer than eight years after rule adoption.

Professor Craig Merlic of UCLA's Department of Chemistry & Biochemistry provided a presentation on the health and safety considerations for HF and sulfuric acid.

Professor Merlic indicated that both acids are highly hazardous materials; however, only HF or MHF form highly hazardous vapor clouds. He concluded that HF presents significantly greater health risks than sulfuric acid and that exposure to HF requires a specific remedy not required for sulfuric acid exposure.

Dr. Burke inquired about other businesses using HF in the Basin, such as glass etching and the quantity they use. Dr. Fine responded that the quantity of HF used in other industries is significantly lower than refineries. It was noted that other industries typically do not use HF at the high temperatures and pressures that contribute to the formation of the dense vapor cloud upon an HF release. Dr. Burke requested that staff look at other industries' using HF and consider whether those uses should be regulated.

Dr. Burke also inquired regarding the amount of additive in the MHF and if that amount has ever been independently verified. Dr. Lyou asked if the level of additive currently used would prevent a cloud from forming. Dr. Merlic stated that there were no published studies to indicate whether a six percent additive would prevent formation of a cloud. Mr. Nastri explained that the expense and hazards of this material has prevented further testing since the studies conducted in the 1990s, and staff has relied on past testing when evaluating the risk.

Mr. Matthew Johnson, representing Supervisor Janice Hahn's office, commented that Supervisor Hahn has not and would not advocate for the closure of TORC and has been a strong advocate for a ban on MHF; however, any ban should be phased in over sufficient years to allow refineries to adjust within a reasonable timeline. Supervisor Hahn strongly advocates for both good jobs and safety.

Mr. Steve Steach and Adam Webb of TORC indicated the recent Cal/OSHA audit found TORC on par with other California refineries. TORC currently meets the proposed Tier I requirements and will be implementing five of the proposed Tier II projects over the next two years such as speed of response, physical barriers and a leak detection system. TORC believes they can engineer a new proposed Tier III "fail-safe" measure, such as protective steel structures around acid settlers and high volume water mitigation around the structure. They stated that converting to a sulfuric acid unit is not financially feasible. Emerging technologies need years to demonstrate feasibility.

Dr. Burke was concerned that water mitigation would not have stopped a large leak that could have happened during the 2015 explosion. Water mitigation may not be effective 100 percent of the time and due to the dense population, the risk impact of a release would still be high. TORC stated that conversion or phase-out is not reasonable, the alternatives are not feasible, and Tier III mitigation is the only choice as it reduces risk, further protects workers, and keeps jobs, clean energy, and the economy running.

Dr. Parker stated his concern about not having the information about testing to prove a vapor cloud is not formed from MHF. Mr. Darren Stroud of TORC stated that

Honeywell UOP is the owner of this proprietary information on MHF technology, not TORC. Sharing the information publicly is UOP's discretion. Notwithstanding, they do not see any issues for the Board to view this proprietary information as an extension of SCAQMD staff's review.

Mayor McCallon stated that the Brown Act requires the Board to provide the public any information the Board used to make a decision. Dr. Lyou confirmed with District Counsel that the Board has to make a decision for rulemaking based on a public record. If there is information that cannot be made public, that does not go into the administrative record and then should not be part of the Board consideration. Dr. Lyou suggested staff write a formal letter to Honeywell requesting they waive the confidentiality claim to allow disclosure of proprietary information.

Mr. Rich Walsh, Vice President/Deputy General Counsel of Valero, highlighted that over the 35 years of operating the HF alkylation unit, there were no incidents or releases, which demonstrates that they have been successful in containing HF. He stated that most of the Tier I and II measures that staff proposed are already in place at the refinery; Tier III such as barriers, encapsulation, or an underground alkylation unit impede inspection and would make the refinery less safe. Banning MHF would effectively close the alkylation unit, and adding building structures around the unit would run counter to the safety directives for process safety management. Thirty percent improvement, due to the modifier in MHF, makes a big difference. Water curtains provide containment around the alkylation unit, as well as the water deluge, fire monitors, detection paint and alarm system. He also noted Valero is in a compact space; there is not a lot of room to build or expand, which leads to more downtime and costs and questioned whether a sulfuric acid unit could even be permitted. Valero also did not support a technology assessment as it would not prove useful. Mr. Walsh stated that Valero is ready to sign a modified MOU that would include every viable Tier I and II mitigation and some Tier III mitigation, such as a shelter-in-place air system on the schools near the refinery.

Dr. Parker inquired about the six percent additive in the Valero MOU and what was analyzed in the CEQA document for the original Proposed Rule 1410. Dr. Burke mentioned, unlike TORC, which is located in a highly populated area, Valero is geographically located in an industrial area. The SCAQMD may be able to consider a modified MOU if a Tier III mitigation package is good enough. That was the logic the Board used 16 years ago when the SCAQMD signed an agreement with Valero.

Dr. Sally Hayati, president of TRAA, described previous HF releases around the world and their consequences. She stated that TORC failed to provide public disclosure of the reduction in percent additive that constitutes their MHF. The additive was reduced to levels low enough to allow for effective production. Mitigation systems can fail due to human error, earthquakes, or other disasters and no system can handle every accident

equally well due to variation in wind speed and direction. An industry-funded test in 1986 showed 100 percent of the HF released formed a visible cloud. Dr. Hayati claimed more mitigation is not enough, although she supported immediate implementation of proposed Tier I and II measures. Refineries say their mitigation systems will eliminate all airborne acid, however, mitigation experts say that good operational systems can knock down only about 80 percent of the acid, thus still leaving a large amount airborne. Ninety percent effectiveness is only achievable in optimal, lab-controlled conditions. A release could affect up to 700,000 people according to U.S. EPA's analysis. A smaller radius of the population could be impacted depending on the size of the release, wind, and the effectiveness of mitigation.

Dr. Parker asked about the acceptable level of modifier in the MHF and Dr. Hayati responded that the amount of additive needed to convey any real safety advantage (e.g., 50 percent) is not usable in the alkylation unit.

Mayor Pro Tem Mitchell inquired about the percent additive required in the TORC original consent decree. Dr. Hayati stated that it is proprietary information, but she thought it was 30-50 percent of additive in the MHF mixture. Dr. Hayati further expressed concerns with MHF usage and what was disclosed to the public.

Mr. David Campbell, union representative for United Steel Workers (USW), representing employees at the Torrance refinery, stated that between these two refineries, HF or MHF have been used for 100 years without any offsite releases. USW's report "Risk Too Great" recommends modified HF as a replacement for HF. PBF Refinery had major turnarounds in the past year which led to a lot fewer flaring incidents, much greater safety, and more training for employees. PBF is willing to do more to enhance safety in the alkylation unit. Phase-out does not allow sufficient time for an alternative process to be permitted. Cal/OSHA has been active in regulating refinery safety and adopted a process safety management revision which allows employees to have shutdown authority if they had a release of MHF at the time of an accident. It also requires a hierarchy control analysis periodically requiring facilities to look at inherently safer technology. The California Energy Commission stated that a MHF ban would cause two refineries to shut down and therefore increase the price of gasoline and jet fuel in the West for a number of years. For these reasons, they do not believe phase-out is appropriate until inherently safer technology is proven and available. In addition, the public cannot afford to lose thousands of jobs and severely damage the California economy through raising gasoline and jet fuel prices. Therefore, USW opposes a ban and supports enhanced mitigation measures.

Mr. Ron Miller of the Los Angeles/Orange Counties Building & Construction Trades Council urged the Committee to reject both staff recommendations and to work with them to make the refineries as safe as they can be. In addition to other safety features in place at refineries, they are achieving safety through training of workers at refineries.

The phase-out of MHF will lead to shutdown of refineries resulting in a loss of jobs and production of less jet fuel. Los Angeles International (LAX) airport gets 30 percent of their jet fuel from these two refineries. Eighty percent of the bunker fuel consumed for ships at the Ports of Los Angeles and Long Beach, ninth busiest in the world, comes from these two refineries. There is no pipeline across the California border so fuel supply is dependent on in-state refineries. He expressed concerns with the recent loss of business in the state.

Public Comments

Approximately 60 speakers including representatives of refineries, union representatives and the public provided comments.

Public comment opened with Mr. Darren Stroud of TORC stating that they are supportive of a process to further enhance safety and are willing to continue that work. They are currently not supportive of a phase-out of MHF because it is not a reasonable approach to addressing risks associated with the alkylation process. Sulfuric acid processes have more greenhouse gas emissions, are more energy intensive and cost-prohibitive, and emerging technologies are years away. They recognize the community concern with MHF. That is why safety is the ultimate goal that TORC strives for, and that proudly, for over 50 years, the refinery has been able to operate the alkylation unit without release. Mr. Stroud stressed that their record has to mean something and it demonstrates that they have the capability to train workers to safely use MHF. He urged the Committee to consider this record. He suggested that it is important to ask about the probability of release and if it occurs, how to mitigate that release. Mr. Stroud stated that their refinery has been successfully demonstrating that for 50 years.

Mr. Rich Walsh of Valero stated they have about 450 people attending the meeting supporting the refinery and keeping the public safe.

Following the refineries, five union representatives provided comments on behalf of their union workers. All union representatives strongly opposed the ban. They wanted to know if they can be assured their jobs will not be lost as a result of this rulemaking. They stated that banning MHF will be detrimental to refinery workers, the community and the union trades. Union workers perform professional jobs and maintain safety all the time. They respectfully asked the Committee to reject the staff recommendation on Proposed Rule 1410 and to direct staff to work with refineries. Dr. Burke suggested that additional testing of MHF is needed. Union representatives noted that staff is asking to change something that the Board had approved years earlier and that making a radical change will have a substantial cost with substantial environmental impacts, and increase the likelihood that refineries will close. Union representatives stated that there is always some risk in life and asked that the SCAQMD work with refineries to mitigate the risk.

Following these comments, the general public, including TRAA members and other former or current union members, provided testimony. A majority of the general public supported Option A, with a phase-out of MHF in four years instead of five years as recommended by staff. Some key comments included:

- The recent cut in corporate tax rates and tax incentives are already in place and would assist the refineries in transitioning out of MHF;
- HF is a “chemical weapon” and refineries could be a target for terrorist activity;
- Refineries are safe until an accident happens;
- No earthquake-proof structure exists and water mitigation is not effective;
- Elimination of MHF is the ultimate mitigation;
- Refineries would not close; PBF took on risk when buying ExxonMobil refinery;
- Fuel prices are too high already and, banning MHF will increase fuel prices;
- Phasing out MHF would result in refinery shut down.; and
- Banning MHF could cause 1,000 small businesses to lose jobs.

Below is the list of speakers who provided public comments.

Maria Alejandra, SBCC (Wilmington)	Seth Hoffman
Katie Baad	Omar Ibarra
Logan Bagby	Marvin Kropke, International Brotherhood of Electrical Workers Local Union
Bill Baxter	Catherine Leys
Timothy Beyer, TRAA	Sherry Lear, 350 South Bay Los Angeles
Lydia Bree	Alejandro Linares
Peter Burgis	Catherine Luciano
Denise Butrouska	Brandon Matson, TORC
Gladimir Buzga	Eric Nakano
Marietta Buzga	Barbara Newman
Sandy Cajias, Regional Hispanic Chamber of Commerce	Gerry O’Conner
Sandra Cartier	Mary Pope
Neftly Chan	David Poster
Antoine Churg	Bill Reynolds
Charles Clendening	Chris Ricardy
Jim Eninger	Rudy Rodriguez, Local 250 Steamfitters
Daniel Figueroa and one iron union worker, on behalf of Iron Workers	Michelle Rushden
Louis Fleming, TRAA	Joaquin Santos, Laborers Local Union 1309
Dana Fontso, Beach Cities Health District	Al Sattler, Sierra Club
Mark Freedman, United Steelworkers	Jerry Secundy, California Council for Environmental and Economic Balance
Dr. Genghmun Eng	Roger Sham
Steve Goldsmith, TRAA	Darren Stroud, TORC
Nancy Griffin	Connie Sullivan
John Hanna, Southwest Region of Carpenters	Cheryl Tchir
George Harpole, TRAA	Sandra Viera
Clifford Heise	Rich Walsh, Valero Wilmington Refinery
Donna Heise, TRAA	Sarah Wiltfong, Bizfed
Judith Herman	Penny Wirsing, TRAA
Burt Hockins, TRAA	Caroline Yoshida
Dan Hoffman, Wilmington Chamber of Commerce	

Public testimony was followed by comments from the Refinery Committee members.

General Counsel Bayron Gilchrist clarified that the Committee would not be voting on a rule proposal, but would rather be making recommendations to staff on how to proceed in terms of rulemaking, which would eventually be considered by the full Board. Secondly, he recommended that the Committee consider whether a rule with the currently recommended concepts or a version that staff would be discussing is ready to go before the full Board or whether to return to the Committee for additional updates. Thirdly, he recommended that the Committee consider what specific options it would like to have in the future so that staff can develop them for consideration.

Mr. Nastri commented that assertions were made that staff has misunderstood or misrepresented some of the facts. There may be differences in opinion, but it does not mean it is wrong or has been misrepresented. When looking at science, it has many different interpretations but one needs to look at the entire body of evidence. In this particular case, staff has reviewed much of the data that exists. Generating additional data is a separate question and that is something that staff would certainly examine. Those are lengthy studies but staff can look into how that may be done to provide more certainty. But when looking at the utilization of certain materials, the responsibility and the burden of proof should be on those using the materials to show it is in fact safe. There may have been questions about the effectiveness of the additive, and there needs to be the data that actually proves it.

Dr. Parker acknowledged that there is a difference between opinion and facts based on evidence. As such, there seems to be no argument that MHF would be the same as HF in that it can form a vapor cloud. What really needs to be discussed is how we mitigate that, if it can be mitigated, eliminate it if there is an alternative, or stay with what we have, if that is acceptable. There should not be speculation without empirical data.

Dr. Fine commented that refineries have not refuted that the modifier of HF has a maximum of 30 percent improvement. Staff has not had time to respond to the TORC comment letter received the night before the meeting.

Mr. Nastri added that there are a lot of areas for which there is agreement, such as Tier I and Tier II mitigation and even further layers of mitigation. The question is whether to phase out the long-term use of MHF. Staff is seeking direction on how we move forward with regard to the ultimate disposition of MHF.

Dr. Lyou started his comments with appreciation for the refineries for having mitigation measures in place and their hard work to ensure safety and to protect the public and their workers; however, he is supportive of additional mitigation to be implemented as quickly as possible. He added that we have to make decisions based on as much information as available to the Committee. Dr. Lyou requested staff investigate the

possibility of the threat of terrorism and earthquakes, and the ability to make confidential information public. He wished the emerging technology were more developed but acknowledged they are not. Dr. Lyou expressed that he is still uncertain as to which option is better and that it might be time to put both of these options before the full Board for direction.

Mayor McCallon noted that every day we face many risks in our lives. He believed risks associated with using MHF in the alkylation process at these refineries are being well managed otherwise he would not personally visit both refineries. Mayor McCallon opposed banning the use of MHF because of the potential adverse impact that the current Proposed Rule 1410 approaches would have on the economy in California if refineries were to cease operation. The Tier I and II mitigation being recommended will enhance the risk management the refineries already have in place. Staff needs to explore Tier III options in a five- to-six-year timeframe and to look at the technology in four to five years to see if an alternative technology is coming along and would be appropriate.

Mayor Pro Tem Mitchell recognized the value of jobs that the refineries bring to the community, as well as the dignity of having those jobs. Jobs are a high priority for the community as well as the Board. Mayor Pro Tem Mitchell stated that she thinks a well-managed risk may still be a risk too great and be unacceptable. The maximum 30 percent benefit protection from MHF is not enough. She questioned if the risk is well managed in the wider community, for example, is there enough remedy to MHF exposure available in local hospitals if a release happens. Accidents and consequences cannot be predicted, but from the history of refinery-associated incidents, there were numerous unplanned accidents. Mayor Pro Tem Mitchell directed staff to proceed with the development of the rule to phase out MHF with the flexibility of how it is phased out and in a manner that would allow refineries to continue to operate. Mayor Pro Tem Mitchell acknowledged alternative alkylation technologies do exist. For example, sulfuric acid alkylation is already a proven alkylation technology and solid acid alkylation technology has been around for years. Refineries would need to think about what alkylation method they want to choose following a phase-out. She also urged staff to collaborate with refineries and labor unions to make sure jobs are preserved in that transition. She also encouraged inclusion of proper mitigation in the rule.

Dr. Parker raised a concern that MHF with the seven percent additive has not been tested so it is not certain how it behaves. He also commented on the two destructive acids used in alkylation that can kill people. One acid, HF, forms a vapor cloud. The other, sulfuric acid, does not. HF moves by wind and covers large areas, which means it is very difficult to control. Sixty times more water than HF is effective to bring it down, but if water is not directly aimed at the source, HF will vaporize and form a cloud. What it does not say is how long and how much it will take in order to become a very

lethal release. Dr. Parker recommended to proceed with Tier I and II mitigations as quickly as possible.

Dr. Burke commented that Torrance residents did not pick HF to be used at the refinery and most did not know it was at the refinery. Dr. Burke supported Tier I and II mitigation and believed more information is needed for Tier III mitigation. He requested that an MOU be drafted with either one or both options, and that this should be discussed at a future Refinery Committee meeting in Wilmington. It is unlikely that one MOU meets the needs of all parties, but stakeholders could be working towards a 90–95 percent agreement.

Dr. Parker concluded with the direction to inquire with Honeywell for the disclosure of confidential information, testing the MHF, and exploring the likelihood of exposures.

Mr. Nastri expressed his intent to return to the Committee in 90 days with the results of further investigation after reaching out to the key stakeholders, such as the Department of Homeland Security, the Federal Bureau of Investigation (FBI), and Honeywell.

Mr. Nastri suggested two options. One option would be rulemaking for Tier I and Tier II and then come back to the Committee with concepts for the ultimate disposition with regards to MHF, or a concurrent MOU-type arrangement. He concluded that staff will be able to report back to the Committee with staff recommendations depending on discussions with stakeholders.

The meeting was adjourned at approximately 2:40 p.m.

Attachment

The staff presentation has been posted online and can be accessed from the following webpage: <http://www.aqmd.gov/nav/about/groups-committees/refinery-committee>.

BOARD MEETING DATE: July 6, 2018

AGENDA NO. 21

REPORT: Stationary Source Committee

SYNOPSIS: The Stationary Source Committee held a meeting on Friday, June 15, 2018. The following is a summary of the meeting.

RECOMMENDED ACTION:
Receive and file.

Ben Benoit, Chair
Stationary Source Committee

LT:eb

Committee Members

Present: Mayor Ben Benoit/Chair (videoconference), Mayor Pro Tem Judith Mitchell, Supervisor Shawn Nelson (joined the meeting at 11:10 a.m. via videoconference), Supervisor Janice Rutherford (videoconference) and Supervisor Hilda L. Solis (videoconference)

Absent: Dr. Joseph Lyou/Vice Chair

Call to Order

Chair Benoit called the meeting to order at 10:30 a.m.

INFORMATIONAL ITEMS:

1. RECLAIM Transition Quarterly Report

Susan Nakamura, Assistant Deputy Executive Officer/Planning, Rule Development and Area Sources, provided the quarterly update regarding transitioning the NOx RECLAIM program to a command-and-control regulatory structure, and highlighting recent activities. Mayor Pro Tem Mitchell asked staff to describe some of the issues for New Source Review (NSR) and the status of refineries' schedules to achieve BARCT compliance by 2023. Ms. Nakamura explained that the main concern with NSR is the availability of emission reduction credits (ERCs) for facilities transitioning out of RECLAIM. ERCs in the open market have limited availability and staff is currently exploring options that would still allow facilities to modernize and grow. In addition, issues regarding accounting for ERCs that were

converted to RECLAIM Trading Credits (RTCs) and other accounting issues as facilities transition from a market-based to a command-and-control regulatory program are being discussed with U.S. EPA. In response to refineries reaching BARCT by 2023, Ms. Nakamura stated that SCAQMD is working towards that goal, but is also mindful of refinery turnaround schedules. Staff has been meeting with refinery representatives to discuss projects that they are working on, as they are aware of the requirements of AB617 and BARCT compliance by December 2023.

2. Summary of Memorandum of Agreement Between CARB and SCAQMD to Implement and Enforce Greenhouse Gas Emission Standards for Crude Oil and Natural Gas Facilities

Rafael Reynosa, Senior Enforcement Manager/Compliance and Enforcement, provided a briefing on the CARB Memorandum of Agreement (MOA) proposal. In addition, he also advised that staff will be seeking approval of the MOA, authorization for the Executive Officer to execute the MOA, and recognizing \$150,000 in revenue from CARB for FY2018-2019, and \$125,000 every year thereafter.

Mayor Pro Tem Mitchell advised for the record, that she is a CARB Board Member.

Supervisor Solis inquired regarding past monies received from CARB for this purpose and also asked what \$150,000 provides. Staff responded that this is a new program, so it is new funding that will cover some additional work at these facilities, which are already inspected by staff. The \$150,000 is approximately equivalent to one full-time employee, however, staff emphasized that the monies would be used to augment program development costs such as staffing, equipment, and/or administration. Additionally, Supervisor Solis requested a list of all oil and gas facilities in Los Angeles County. Staff committed to providing her the list.

3. Update on Assembly Bill 617 (AB 617)

Dr. Philip Fine, Deputy Executive Officer/Planning, Rule Development and Area Sources, presented an update on the implementation of AB 617 and the work completed for identifying and prioritizing communities. He also provided draft recommendations for high-priority communities.

Supervisor Solis requested a list with the number of attendees at each community meeting and suggested additional resources to improve outreach. Executive Officer Wayne Nastri responded that staff would work with her office to expand outreach efforts.

Supervisor Solis asked staff to evaluate unincorporated Los Angeles County areas in the San Gabriel Valley that were not included in the list, and also inquired whether we can expand the first-year communities to include additional areas. Dr. Fine

mentioned that all areas were screened according to the same criteria, and that staff can take a look at the community boundary definitions.

Mayor Pro Tem Mitchell asked for clarification on the date of submission to CARB. Dr. Fine mentioned that the submission date is July 31 and emphasized the need to convey to CARB the basis of SCAQMD recommendations, including the technical assessment that was part of the community selection and prioritization process.

Mayor Benoit asked about the implementation schedule of a few communities in Riverside County. Dr. Fine responded that the implementation schedule and community profiles will be provided in the final submission to CARB in July. Mr. Nastri also clarified that only 3 to 4 communities will be considered for the first year of implementation, due to limited resources.

Mayor Pro Tem Mitchell asked for more information about the implementation schedule for Eastern Coachella Valley. Dr. Fine said that different metrics are used for this area and noted that there were several monitoring efforts in that community that are currently getting started. Dr. Fine suggested that AB 617 implementation efforts could occur in the next couple of years, with potential collaboration with Comite Civico del Valle to implement the program in that region.

Supervisor Nelson joined the meeting at 11:10 am via videoconference.

- 4. Summary of 2017 Annual Report on AB 2588 Program and Updates to Facility Prioritization Procedures, supplemental Guidelines for AB 2588 Program, and Guidelines for Participating in Rule 1402 Voluntary Risk Reduction Program**
Dr. Jillian Wong, Manager/Planning, Rule Development and Area Sources, provided a summary of the AB 2588 program, overview of SCAQMD 2017 toxics activities, and updates to guidance documents for implementation of Rule 1402. Mayor Pro Tem Mitchell asked how staff selected the facilities to audit. Dr. Wong explained that a priority score is calculated based on the facility's emissions and staff ranks and sorts the priority scores to ensure the highest priority facilities are audited first. Mayor Pro Tem Mitchell asked what is included in an emissions inventory. Dr. Wong responded that it was based on their stationary source emissions, including diesel particulate emissions. Mr. Nastri added that emissions are reported through the Annual Emissions Reporting (AER) Program and Ms. Whynot added that other factors, such as compliance staff observations in the field or engineering review might also cause a facility to be pulled into AB 2588.

WRITTEN REPORTS:

5. Notice of Violation Penalty Summary

The report was acknowledged by the Committee.

OTHER MATTERS:

6. Other Business

There was no other business.

7. Public Comment Period

There were no public comments.

8. Next Meeting Date

The next regular Stationary Source Committee meeting is scheduled for Friday, July 20, 2018.

Adjournment

The meeting was adjourned at 11:30 a.m.

Attachments

1. Attendance Record
2. Draft Notice of Violation Penalty Summary

ATTACHMENT 1

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
STATIONARY SOURCE COMMITTEE**

Attendance – June 15, 2018

Mayor Ben Benoit (videoconference)	SCAQMD Governing Board
Mayor Pro Tem Judith Mitchell	SCAQMD Governing Board
Supervisor Hilda L. Solis (videoconference)	SCAQMD Governing Board
Supervisor Shawn Nelson (videoconference)	SCAQMD Governing Board
Supervisor Janice Rutherford (videoconference)	SCAQMD Governing Board
David Czamanske	Board Consultant (Cacciotti)
Ron Ketcham	Board Consultant (McCallon)
Terry Allen	CARB
Tom Gross	Southern California Edison
Priscilla Hamilton	SoCalGas
Pat King	Morrell's Electro Plating
Bill LaMarr	California Small Business Alliance
Rita Loof	RadTech
Bill Pearce	Boeing
Susan Stark	Andeavor
Tammy Yamasaki	Southern California Edison
Philip Fine	SCAQMD staff
Bayron Gilchrist	SCAQMD staff
Rafael Reynoso	SCAQMD staff
Susan Nakamura	SCAQMD staff
Wayne Nastri	SCAQMD staff
Laki Tisopoulos	SCAQMD staff
Jill Whynot	SCAQMD staff
Jillian Wong	SCAQMD staff

DRAFT
INDEX OF DISTRICT'S RULES AND REGULATIONS

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REGULATION II - PERMITS

List and Criteria Identifying Information Required of Applicants Seeking A Permit to Construct from the South Coast Air Quality Management District

- Rule 201 Permit to Construct
- Rule 203 Permit to Operate

REGULATION III - FEES

- Rule 314 Fees for Architectural Coatings

REGULATION IV - PROHIBITIONS

- Rule 402 Nuisance
- Rule 403 Fugitive Dust (*Pertains to solid particulate matter emitted from man-made activities.*)
- Rule 461 Gasoline Transfer and Dispensing

REGULATION XI - SOURCE SPECIFIC STANDARDS

- Rule 1146 Emissions of Oxides of Nitrogen from Industrial, Institutional and Commercial Boilers, Steam Generators, and Process Heaters
- Rule 1147 Nox Reductions From Miscellaneous Sources
- Rule 1173 Fugitive Emissions of Volatile Organic Compounds
- Rule 1176 Sumps and Wastewater Separators

REGULATION XIV - TOXICS

- Rule 1415 Reduction of Refrigerant Emissions from Stationary Refrigeration and Air Conditioning Systems
- 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
- Rule 2011 Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (SO_x) Emissions
- Rule 2012 Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NO_x) Emissions

REGULATION XXX TITLE V PERMITS

- Rule 3002 Requirements
- Rule 3003 Applications

CALIFORNIA HEALTH AND SAFETY CODE

41700 Violation of General Limitations
41960.2 Gasoline Vapor Recovery
42401 Violation of Order for Abatement

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
General Counsel's Office
DRAFT
May 2018 Settlement Penalty Report**

<u>Total Penalties</u>	
Civil Settlements:	\$698,950.00
Self-Reported Settlements:	\$2,500.00
MSPAP Settlements:	\$18,900.00
Hearing Board Settlements:	\$32,500.00
Total Cash Settlements:	\$752,850.00
Total SEP Value:	\$0.00
Fiscal Year through 5/2018 Cash Total:	\$10,729,426.43
Fiscal Year through 5/2018 SEP Value Only Total:	\$2,120,000.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
Civil Settlements						
57390	ADVANCE TRUCK PAINTING INC	3002(c)(1) 3003	5/11/2018	SH	P64456	\$750.00
179817	AIRPORT 76, 7-ELEVEN	203 (a) 461(e)(2) 41960.2	5/11/2018	BST	P61262 P65725 P65729 P65748	\$5,000.00
167066	ARLON GRAPHICS L.L.C.	2012	5/23/2018	ML	P62509	\$5,000.00
153992	CANYON POWER PLANT	2004	5/15/2018	SH	P60570	\$750.00
800030	CHEVRON PRODUCTS CO.	1173 2004(f)(1) 203 (b) 3002(c)(1) 1176(e)(1) 1176(e)(2)(B)	5/1/2018	NSF	P58232 P58233 P58235 P60561	\$43,500.00
2526	CHEVRON USA INC	3002	5/10/2018	NSF	P52628 P59380	\$5,000.00
143740	DCOR LLC	1173	5/25/2018	BST	P60281	\$3,000.00
156741	HARBOR COGENERATION CO, LLC	2012(c)(3)(A)	5/18/2018	WBW	P60578	\$5,100.00
158080	KARNAK CORP.	314	5/2/2018	WBW	P64814	\$3,000.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
800075	LA CITY, DWP SCATTERGOOD GENERATING STN	2004(f)(1) 203(b) 3002(c)(1)	5/23/2018	NSF	P60560 P60574	\$10,800.00
127770	LA CO - CAMP KILPATRICK TREATMENT PLANT	42401	5/15/2018	NSF	P60534	\$25,000.00
86790	LA VERNE CAR WASH	203(b) 461(c)(2)(B)	5/31/2018	SH	P63107	\$4,000.00
27704	MILE SQUARE GOLF COURSE	402 41700	5/1/2018	NAS	P63858	\$2,500.00
10656	NEWPORT LAMINATES	3003	5/24/2018	BST	P63863	\$2,000.00
800409	NORTHROP GRUMMAN SYSTEMS CORPORATION	2004	5/31/2018	BST	P64377	\$1,800.00
12182	PARK LA BREA	3002	5/23/2018	ML	P60140	\$4,000.00
182451	REYES ENERGY	402 41700	5/1/2018	DH	P65213	\$3,250.00
161300	SAPA EXTRUDER, INC	2004	5/1/2018	WBW	P65374	\$1,000.00
14926	SEMPRA ENERGY (THE GAS CO)	2012(c)(2)(A) 3002(c)(1) 402 2004(f)(1) 2012 Appen A 203(b) 41700 203(a)	5/18/2018	NSF	P59387 P59389 P59393 P59395 P59397 P60288 P60292 P60293 P60567 P60586 P61740 P62953 P62959	\$550,000.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
					P62964	
					P63256	
					P63258	
					P63259	
					P63260	
					P66502	
					P67701	
166764	SHELL	203(b) 461(c)	5/15/2018	WBW	P64328 KC070096	\$2,000.00
800338	SPECIALTY PAPER MILLS INC	2004	5/10/2018	ML	P62062	\$500.00
18931	TAMCO	2004(d) 2011(c)(3)(A) 2012(c)(3)(A)	5/15/2018	NSF	P64419	\$20,000.00
24450	TREND MANOR FURNITURE MFG. CO., INC	3002(c)(1) 3003	5/1/2018	NSF	P59641 P64451	\$1,000.00

Total Civil Settlements: \$696,950.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
Self-Reported Settlements						
156146	KAISER FOUNDATION HOSPITAL	1146	5/15/2018	RFL		\$2,500.00

Total Self-Reported Settlements: \$2,500.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
MSPAP Settlements						
184940	GREYSTAR	403(d)(1) 403(d)(2)	5/10/2018	GC	P65259	\$2,600.00
119315	HOME DEPOT, USA INC	1470 203(b)	5/10/2018	GC	P65557	\$4,500.00
169463	INSTITUTE FOR ADVANCED HEALTH, NANT HOLD	1415	5/10/2018	GC	P63682	\$600.00
155794	LAX WHEEL REFINISHING INC	201 203(a) 203(b)	5/23/2018	TF	P65256	\$500.00
186340	MDM CONSTRUCTION CO	403(d)(2)	5/23/2018	TF	P65056	\$500.00
109396	NAVIZADEH MINIMART & GAS, K & F NAVI INC	461(c)(2)(B)	5/10/2018	TF	P60099	\$500.00
181537	PDQ RENTALS	461(e)(2)(C)	5/10/2018	TF	P66554	\$700.00
122529	SULLY MILLER CONTRACTING CO.	403(d)(1) 403(d)(2)	5/23/2018	GV	P63916	\$6,000.00
177862	THE MADISON CLUB	203	5/10/2018	TF	P63138	\$800.00
181801	UNITED PACIFIC #5695	203	5/3/2018	GV	P64980	\$1,600.00
131433	VALLEJO MINI MARKET & GAS STATION	41960.2 461	5/10/2018	TF	P64991	\$600.00

Total MSPAP Settlements: \$18,900.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
Hearing Board Settlements						
160245	GATEWAY CREMATORY, SMART CREMATION CA	1147	5/11/2018	BST	6095-1	\$32,500.00

Total Hearing Board Settlements: \$32,500.00

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BOARD MEETING DATE: July 6, 2018

AGENDA NO. 22

REPORT: Technology Committee

SYNOPSIS: The Technology Committee held a meeting on Friday, June 15, 2018. The following is a summary of the meeting.

RECOMMENDED ACTION:
Receive and file.

Joe Buscaino, Chair
Technology Committee

MMM:pmk

Committee Members

Present: Council Member Joe Buscaino/Chair (videoconference), Mayor Larry McCallon, Mayor Pro Tem Judith Mitchell, Council Member Dwight Robinson, Supervisor Janice Rutherford (teleconference) and Supervisor Hilda L. Solis (videoconference)

Absent: None

Call to Order

Mayor Pro Tem Mitchell called the meeting to order at 12:04 p.m. for Chair Buscaino, who joined the meeting at 12:12 pm.

ACTION ITEMS:

1. Execute and Amend Contracts for Technical Assistance for Advanced, Low and Zero Emission Mobile and Stationary Source Technologies and Implementation of Incentive Programs

On February 2, 2018, the Board approved the release of an RFQ to solicit proposals to provide technical assistance, implementation and outreach support for advanced, low and zero emissions technologies for the Clean Fuels Program and various incentive funding programs. Sixteen proposals were received in response to the solicitation. These actions are to execute or amend contracts with 11 technical experts to provide technical

assistance and outreach support in an amount not to exceed \$2,810,000, comprised of \$810,000 from the Clean Fuels Program Fund (31), \$450,000 from the Carl Moyer Program AB 923 Fund (80), \$375,000 from the Community Air Protection AB 134 Fund (77) and \$1,175,000 from the HEROS II Special Revenue Fund (56). Funding from the Carl Moyer AB 923, AB 134 and HEROS II special revenue funds will be from the administrative portion of those funds.

Supervisor Solis asked about the qualifications of the Foundation for California Community Colleges (FCCC), Liberty Hill Foundation, and UC California, Riverside. Staff explained the unique qualifications of all three entities and their contributions to SCAQMD's demonstration and incentive funding programs. At the Supervisor's request staff will provide additional information regarding FCCC's previous work with SCAQMD including their outreach. Staff will evaluate the performance of future events we hold and inform the committee.

Moved by Robinson; seconded by Solis; unanimously approved.

Ayes: Buscaino, McCallon, Mitchell, Robinson, Rutherford and Solis
Noes: None
Absent: None

2. Recognize Revenue from Participating Members of California Natural Gas Vehicle Partnership, Transfer Funds for SCAQMD's Membership, and Approve Budget and Expenditures for Activities and Projects during FYs 2018-19 and 2019-20

The Board established the California Natural Gas Vehicle Partnership (CNGVP) to promote greater deployment of natural gas vehicles in California. To fund program administration, activities and projects, and achieve the goals of the CNGVP, the Voting Members of the Steering Committee pay dues for a two-year membership while Associate Members participate through in-kind contributions. These actions are to: 1) recognize revenue from participating and future CNGVP Members; 2) transfer \$25,000 from the Clean Fuels Program Fund (31) into the Natural Gas Vehicle Partnership Fund (40) for SCAQMD's two-year membership for FYs 2018-19 and 2019-20; 3) approve the FYs 2018-19 and 2019-20 CNGVP Budget; and 4) authorize the Executive Officer to approve individual expenditures, as approved by the CNGVP, for FYs 2018-19 and 2019-20 up to \$75,000 but not to exceed \$225,000 for each fiscal year.

Supervisor Rutherford recused herself due to a campaign contribution from CR&R Inc. Council Member Robinson disclosed that he does not have a financial interest but is required to identify for the record that he is a member (representing SCAQMD) of the CNGVP which is involved in the item.

Moved by Mitchell; seconded by Solis; unanimously approved.

Ayes: Buscaino, McCallon, Mitchell, Robinson and Solis

Noes: None

Abstain: Rutherford

Absent: None

3. Recognize and Transfer Revenue and Execute Contract to Develop and Demonstrate Zero Emission Trucks and EV Infrastructure

SCAQMD fosters development and demonstration of zero emission goods movement technologies. Daimler Trucks North America LLC (DTNA) proposes to develop 20 heavy-duty electric trucks with EV infrastructure that includes energy storage systems to demonstrate the trucks in real-world commercial fleet operations in and around environmental justice communities. These actions are to recognize revenue up to \$2,000,000 from the San Pedro Bay Ports and transfer up to \$4,440,000 from the State Emissions Mitigation Fund (39) and \$11,230,072 from the Clean Fuels Program Fund (31) into the Advanced Technology Goods Movement Fund (61). Of the \$11,230,072, up to \$2,000,000 is for a temporary loan pending receipt of the Ports' cofunding and \$9,230,072 is for SCAQMD's cost-share for the project. Staff is actively seeking additional cofunding; if realized, SCAQMD's cost-share may decrease, subject to Board consideration. This action is to also execute a contract with DTNA to develop and demonstrate 20 heavy-duty electric trucks and EV infrastructure in an amount not to exceed \$15,670,072 from the Advanced Technology Goods Movement Fund (61).

Council Member Buscaino fully supported the proposal which helps to implement the port's Clean Air Action Plan for zero emission ports, and requested that Technology Committee members attend any public launch events.

Mayor Pro Tem Mitchell asked about the State Emission Mitigation Fund and the role that the recently approved VW Settlement Funds would have for this type of project. Staff explained that the state provided \$30M to fund projects to mitigate emissions from peaker power plant generation. Staff further explained that incentive funds like the VW Settlement would be used to lower the cost of the vehicles upon commercial availability.

Mayor McCallon inquired who would collect the data, what data was being collected and how the data was going to be collected. Staff informed the committee that Daimler would telematically collect the data from the vehicles and infrastructure and assess the information for power demand and battery performance on varying duty cycles.

Supervisor Solis inquired about the location of the electric vehicle supply equipment (EVSE) and suggested they be placed in major freight corridors. Staff informed the committee that EVSE will be located at partnering fleets, but staff will continue to assess opportunities to place the EVSE in major freight corridors.

Council Member Robinson inquired about the funds allocated to EVSE and equipment and trucks, as well as the anticipated cost of the potential commercial truck. Staff informed the committee that about a third of the budget is for the EVSE and equipment and a little over half of the budget is for the 20 trucks. Additionally, Daimler has not yet identified the potential market price for the electric trucks, but are considering available incentive funds before establishing a market price.

Moved by Mitchell; seconded by Robinson; unanimously approved.

Ayes: Buscaino, McCallon, Mitchell, Robinson, Rutherford and Solis

Noes: None

Absent: None

OTHER MATTERS:

4. Other Business:

There was no other business.

5. Public Comment Period:

There were no public comments.

6. Next Meeting Date

The next regular Technology Committee meeting is scheduled for Friday, July 20, 2018 at noon.

Adjournment

The meeting adjourned at 12:47 p.m.

Attachment

Attendance Record

ATTACHMENT

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
TECHNOLOGY COMMITTEE MEETING
Attendance Record – June 15, 2018**

Council Member Joe Buscaino (videoconference)	SCAQMD Board Member
Mayor Larry McCallon	SCAQMD Board Member
Mayor Pro Tem Judith Mitchell	SCAQMD Board Member
Council Member Dwight Robinson	SCAQMD Board Member
Supervisor Janice Rutherford (teleconference)	SCAQMD Board Member
Supervisor Hilda L. Solis (videoconference)	SCAQMD Board Member
Mark Abramowitz	Board Consultant (Lyou)
David Czamanske	Board Consultant (Cacciotti)
Ron Ketcham	Board Consultant (McCallon)
Andrew Silva	Board Consultant (Rutherford)
Dana Foist	Clean Fuel Connection
Bridget McCann	Western States Petroleum Association
Erik Neandross	Gladstein, Neandross & Associates
Susan Stark	Andeavor
Sam Atwood	SCAQMD Staff
Phil Barroca	SCAQMD Staff
Naveen Berry	SCAQMD Staff
Bay Gilchrist	SCAQMD Staff
Joseph Impullitti	SCAQMD Staff
Pat Krayser	SCAQMD Staff
Fred Minassian	SCAQMD Staff
Matt Miyasato	SCAQMD Staff
Cynthia Snyder	SCAQMD Staff
Vicki White	SCAQMD Staff
Jill Whynot	SCAQMD Staff
Paul Wright	SCAQMD Staff

[↑ Back to Agenda](#)

BOARD MEETING DATE: July 6, 2018

AGENDA NO. 23

REPORT: Mobile Source Air Pollution Reduction Review Committee

SYNOPSIS: Below is a summary of key issues addressed at the MSRC's meeting on June 21, 2018. The next meeting is scheduled for Thursday, August 16, 2018, at 2:00 p.m., in Conference Room CC8.

RECOMMENDED ACTION:
Receive and file.

Megan Lorenz
Principal Deputy District Counsel

MMM:FM:pse

Meeting Minutes Approved

The MSRC unanimously approved the minutes of the May 17, 2018 meeting. The approved minutes are attached for your information (*Attachment 1*).

FYs 2016-18 Local Government Partnership Program (new awards)

The MSRC approved the release of Local Government Partnership PON2018-01 under the FYs 2016-18 Work Program. The Invitation to Negotiate (ITN), with a targeted funding level of \$21,180,650, focuses on providing funds for projects to support SCAQMD's 2016 AQMP. Cities and counties which have opted into the AB 2766 motor vehicle registration surcharge fee program are eligible to participate. The majority of participants would be allocated maximum funding equivalent to their annual AB 2766 Subvention Fund allocation; however, those whose annual Subvention Fund allocation is less than \$50,000 would be eligible to receive a maximum of \$50,000, and the maximum allocation for any single city or county would be \$3,000,000. MSRC funding could be used for light-duty zero emission vehicle purchases and leases, medium- and heavy-duty zero emission vehicle purchases, near-zero emission heavy-duty alternative fuel vehicle purchases and repower, electric vehicle charging station installation, and construction or expansion of alternative fuel refueling infrastructure, subject to match funding requirements as outlined in the ITN. Additionally, those

jurisdictions eligible for a maximum contribution of \$50,000 would have the option to pursue traffic signal synchronization, bicycle active transportation, and first mile/last mile strategies. The ITN includes an open application period commencing with its release on September 1, 2017, and closing August 2, 2018. The MSRC previously approved awards totaling \$6,552,616 in response to this solicitation. The MSRC approved nine additional awards totaling \$1,855,906 as part of the FYs 2016-18 Work Program, as follows:

- a. A contract with the City of Buena Park in an amount not to exceed \$107,960 to install at least five electric vehicle charging stations;
- b. A contract with the City of Orange in an amount not to exceed \$25,000 to procure a heavy-duty near-zero-emission vehicle;
- c. A contract with the City of Culver City in an amount not to exceed \$1,130 to procure a light-duty zero-emission vehicle;
- d. A contract with the City of Orange in an amount not to exceed \$59,776 to procure up to four light-duty zero-emission vehicles and install at least eight electric vehicle charging stations;
- e. A contract with the County of Riverside in an amount not to exceed \$425,000 to procure up to seventeen heavy-duty near-zero-emission vehicles;
- f. A contract with the City of Pasadena in an amount not to exceed \$183,670 to install at least forty electric vehicle charging stations;
- g. A contract with the City of Santa Monica in an amount not to exceed \$121,500 to install at least thirty-nine electric vehicle charging stations;
- h. A contract with the City of Beaumont in an amount not to exceed \$31,870 to install at least two electric vehicle charging stations; and
- i. A contract with the City of Los Angeles in an amount not to exceed \$900,000 to procure up to eight medium-duty zero-emission vehicles and install at least eight electric vehicle charging stations.

These contract awards will be considered by the SCAQMD Board at its July 6, 2018 meeting.

FYs 2016-18 Local Government Partnership Program (modified awards)

The MSRC also considered and approved proposed modifications to previous Local Government Partnership Program awards, increasing the value of the awards by a total of \$38,450 as part of approval of the FYs 2016-18 Work Program, as follows:

- a. For the May 4, 2018 \$365,000 award to the City of Santa Ana for the procurement of six light-duty zero-emission vehicles and nine heavy-duty near-zero-emission vehicles as well as the installation of electric vehicle charging stations, increase the award by \$20,000 to \$385,000, to correct a computational error in the application;
- b. For the May 4, 2018 \$86,174 award to the City of Perris for the procurement of a medium-duty zero-emission vehicle and the installation of electric vehicle charging stations, increase the award by \$8,450 to \$94,624, to correct a discrepancy in the application; and

- c. For the June 1, 2018 \$115,690 award to the City of Mission Viejo for the procurement of two light-duty zero-emission vehicles, the expansion of an existing CNG station, and the installation of electric vehicle charging stations, increase the award by \$10,000 to \$125,690, to accommodate the City's request that the \$10,000 they had requested for pilot building permit fee and electric vehicle technology training programs be directed towards electric vehicle charging stations if the proposed pilot programs were deemed ineligible.

These contract awards will be considered by the SCAQMD Board at its July 6, 2018 meeting.

Contract Modification Requests

The MSRC considered four contract modification requests and took the following actions:

1. For City of San Dimas, Contract # ML16042, which provides \$55,000 to install EV charging infrastructure, authorize a one-year contract term extension due to the unanticipated need to install separate meters;
2. For City of Eastvale, proposed Contract #ML18064, which provides \$80,400 to purchase two medium-duty zero emission vehicles and install EV charging stations, authorize a modified scope to purchase two light-duty and one medium-duty zero emission vehicles, instead of the two medium-duty zero emission vehicles originally proposed, with no change to the EV charging stations project element or to the total award amount. This contract modification will be considered by the SCAQMD Board at its July 6, 2018 meeting;
3. For Riverside County Transportation Commission, Contract #MS16082, which provides \$590,759 for Extended Freeway Service Patrol (FSP) Service, authorize a one-year contract term extension, as well as a modification to the scope to allow for reimbursement of extended FSP services beyond the construction period which concluded in March 2018; and
4. For City of Bellflower, Contract #ML12051, which provides \$100,000 to install EV charging infrastructure, authorize a contract replacement to complete the scope of work for the contract due to expiration of the prior contract.

Received and Approved Final Reports

The MSRC received and unanimously approved five final report summaries this month as follows:

1. Bonita Unified School District, #MS12008, which provided \$175,000 to Construct a New Limited-Access CNG Station.
2. Brea Olinda Unified School District, #MS12083, which provided \$59,454 to Install New CNG Infrastructure.
3. Los Angeles County MTA, #MS14001, which provided \$1,216,637 for the Clean Fuel Transit Service to Dodger Stadium.

4. Arrow Services, Inc., #MS16103, which provided \$100,000 to Construct a Limited-Access CNG Station.
5. City of Norwalk, # MS16114, which provided \$45,000 to Repower 3 Transit Buses.

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 April 26 through May 30, 2018 is attached (*Attachment 2*) for your information.

Attachments

1. Approved May 17, 2018 Meeting Minutes
2. April 26 through May 30, 2018 Contracts Administrator's Report



MOBILE SOURCE AIR POLLUTION REDUCTION REVIEW COMMITTEE
THURSDAY, MAY 17, 2018 MEETING MINUTES
21865 Copley Drive, Diamond, Bar, CA 91765 - Conference Room CC-8

MEMBERS PRESENT:

(Vice-Chair) Larry McCallon, representing SBCTA
Ben Benoit, representing SCAQMD
Brian Berkson (Alt.), representing RCTC
Michael Carter (Alt.), representing California Air Resources Board
Michele Martinez, representing SCAG
Dolores Roybal Saltarelli (Alt.), representing Regional Rideshare Agency (via v/c)
Greg Winterbottom, representing OCTA
Mark Yamarone (Alt.), representing Los Angeles County MTA (via v/c)

MEMBERS ABSENT:

(Chair) Greg Pettis, representing RCTC
Jack Kitowski, representing California Air Resources Board
Steve Veres, representing LA County MTA

MSRC-TAC MEMBERS PRESENT:

Rongsheng Luo, representing SCAG
Kelly Lynn, representing SBCTA
Vicki White, representing SCAQMD

OTHERS PRESENT:

Leo Jones, CNG Transition
Sean Skidmore, LA County of Dept. of Public Works
Ric Teano, OCTA

SCAQMD STAFF & CONTRACTORS

Leah Alfaro, MSRC Contracts Assistant
Penny Shaw Cedillo, MSRC Administrative Liaison
Ray Gorski, MSRC Technical Advisor-Contractor
John Kampa, Financial Analyst
Megan Lorenz, Principal Deputy District Counsel
Matt Mackenzie, MSRC Contracts Assistant
Fred Minassian, Asst. Deputy Executive Officer
Cynthia Ravenstein, MSRC Contracts Administrator
Paul Wright, Information Technology Specialist

CALL TO ORDER

- Call to Order

MSRC Vice-Chair Larry McCallon called to order at 2:00 p.m.

Roll call was taken at the start of the meeting. The following members and alternates were present: BEN BENOIT, MICHAEL CARTER, MICHELE MARTINEZ, LARRY MCCALLON, DOLORES ROYBAL SALTARELLI, GREG WINTERBOTTOM, MARK YAMARONE.

- Opening Comments

There were no opening comments.

- Election of MSRC Chair and Vice-Chair

Nominations for the Chair and Vice-Chair positions were opened.

A motion from MSRC Member Michele Martinez and seconded by MSRC Member Greg Winterbottom nominated MSRC Vice-Chair Larry McCallon to serve as Chair.

No further nominations were offered, so nominations were closed.

THE MSRC UNANIMOUSLY VOTED TO APPROVE THE ABOVE NOMINATION. AYES: BENOIT, CARTER, MARTINEZ, MCCALLON, ROYBAL SALTARELLI, WINTERBOTTOM, YAMARONE.
NOES: NONE.

A motion from MSRC Member Ben Benoit and seconded by MSRC Member Michele Martinez nominated MSRC Member Greg Winterbottom to serve as Vice-Chair.

No further nominations were offered, so nominations were closed.

THE MSRC UNANIMOUSLY VOTED TO APPROVE THE ABOVE NOMINATION. AYES: BENOIT, CARTER, MARTINEZ, MCCALLON, ROYBAL SALTARELLI, WINTERBOTTOM, YAMARONE.
NOES: NONE.

- STATUS REPORT

Copies of the Clean Transportation Policy Update were distributed at the meeting.

CONSENT CALENDAR (Items 1 through 8)

MSRC Alternate Dolores Roybal Saltarelli stated that she does not have any financial interest in items #8 and #11, but disclosed for the record that she is employed by L.A. County Metropolitan Transportation Authority, which is involved both of these items.

MSRC Alternate Mark Yamarone stated that he does not have any financial interest in items #8 and #11, but disclosed for the record that he is employed by L.A. County Metropolitan Transportation Authority, which is involved in both of these items.

Receive and Approve Item**Agenda Item #1 – Minutes for the March 15 and April 19, 2018 MSRC Meetings**

The minutes of the March 15 and April 19, 2018 MSRC meetings were distributed at the meeting.

ON MOTION BY MSRC MEMBER BEN BENOIT, AND SECONDED BY MSRC VICE-CHAIR GREG WINTERBOTTOM, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #8, THE MSRC UNANIMOUSLY APPROVED THE MARCH 15 AND APRIL 19, 2018 MSRC MEETING MINUTES.

AYES: BENOIT, CARTER, MARTINEZ, MCCALLON, ROYBAL SALTARELLI, WINTERBOTTOM, YAMARONE.

NOES: NONE.

ACTION: Staff will include the March 15 and April 19, 2018 MSRC meeting minutes in the MSRC Committee Report for the June 1, 2018 SCAQMD Board meeting, and will place copies on the MSRC's website.

Information Only - Receive and File**Agenda Item #2 – MSRC Contracts Administrator's Report**

The MSRC AB 2766 Contracts Administrator's Report for March 29 through April 25, 2018 was included in the agenda package.

ON MOTION BY MSRC MEMBER MICHELE MARTINEZ, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #2 THROUGH #8, THE MSRC UNANIMOUSLY VOTED TO RECEIVE AND FILE THE CONTRACTS ADMINISTRATOR'S REPORT FOR MARCH 29 THROUGH APRIL 25, 2018.

AYES: BENOIT, CARTER, MARTINEZ, MCCALLON, ROYBAL SALTARELLI, WINTERBOTTOM, YAMARONE.

NOES: NONE.

ACTION: Staff will include the MSRC Contracts Administrator's Report in the MSRC Committee Report for the July 6, 2018 SCAQMD Board meeting.

Agenda Item #3 – Financial Report on AB 2766 Discretionary Fund

A financial report on the AB 2766 Discretionary Fund for April 2018 was included in the agenda package.

ON MOTION BY MSRC MEMBER MICHELE MARTINEZ, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #2 THROUGH #8, THE MSRC UNANIMOUSLY VOTED TO RECEIVE AND FILE THE FINANCIAL REPORT FOR THE PERIOD ENDING APRIL 2018.

AYES: BENOIT, CARTER, MARTINEZ, MCCALLON, ROYBAL SALTARELLI, WINTERBOTTOM, YAMARONE.

NOES: NONE.

ACTION: No further action is required.

For Approval – As Recommended

Agenda Item #4 – Consider 22-Month Term Extension for the City of Claremont, Contract #ML16053 (\$498,750 – Implement “Complete Streets” Project)

The City of Claremont requests a 22-month term extension due to a longer than anticipated design process to address unanticipated community and regulatory feedback. The MSRC-TAC unanimously recommends approval.

ON MOTION BY MSRC MEMBER MICHELE MARTINEZ, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #2 THROUGH #8, MSRC UNANIMOUSLY VOTED TO APPROVE THE 22-MONTH TERM EXTENSION FOR THE CITY OF CLAREMONT, CONTRACT #ML16053.

AYES: BENOIT, CARTER, MARTINEZ, MCCALLON, ROYBAL SALTARELLI, WINTERBOTTOM, YAMARONE.

NOES: NONE.

ACTION: MSRC Staff will amend the above contract accordingly.

Agenda Item #5 – Consider One-Year Term Extension for the County of Los Angeles, Department of Public Works, Contract #ML14023 (\$230,000 – Upgrade Westchester Maintenance Facility)

The County of Los Angeles, Department of Public Works requests a one-year term extension due to unanticipated delays in obtaining Building Department approval of the HVAC design. The MSRC-TAC unanimously recommends approval.

ON MOTION BY MSRC MEMBER MICHELE MARTINEZ, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #2 THROUGH #8, MSRC UNANIMOUSLY VOTED TO APPROVE THE ONE-YEAR TERM EXTENSION FOR THE COUNTY OF LOS ANGELES, DEPARTMENT OF PUBLIC WORKS, CONTRACT #ML14023.

AYES: BENOIT, CARTER, MARTINEZ, MCCALLON, ROYBAL SALTARELLI, WINTERBOTTOM, YAMARONE.

NOES: NONE.

ACTION: MSRC Staff will amend the above contract accordingly.

Agenda Item #6 – Consider One-Year Term Extension for the County of Los Angeles, Department of Public Works, Contract #ML14024 (\$230,000 – Upgrade Baldwin Park Maintenance Facility)

The County of Los Angeles, Department of Public Works requests a one-year term extension due to unanticipated delays in obtaining Building Department approval of the HVAC design. The MSRC-TAC unanimously recommends approval.

ON MOTION BY MSRC MEMBER MICHELE MARTINEZ, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #2 THROUGH #8, MSRC UNANIMOUSLY VOTED TO APPROVE THE ONE-YEAR TERM EXTENSION FOR THE COUNTY OF LOS ANGELES, DEPARTMENT OF PUBLIC WORKS. CONTRACT #ML14024.

AYES: BENOIT, CARTER, MARTINEZ, MCCALLON, ROYBAL SALTARELLI, WINTERBOTTOM, YAMARONE.

NOES: NONE.

ACTION: MSRC Staff will amend the above contract accordingly.

Agenda Item #7 – Consider One-Year Term Extension for the County of Los Angeles, Department of Public Works, Contract #ML14025 (\$300,000 – Install CNG Station in Malibu)

The County of Los Angeles, Department of Public Works requests a one-year term extension due to longer than expected time needed for the Gas Company to connect the station to the meter. The MSRC-TAC unanimously recommends approval.

ON MOTION BY MSRC MEMBER MICHELE MARTINEZ, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #2 THROUGH #8, MSRC UNANIMOUSLY VOTED TO APPROVE THE ONE-YEAR TERM EXTENSION FOR THE COUNTY OF LOS ANGELES, DEPARTMENT OF PUBLIC WORKS, CONTRACT #ML14025.

AYES: BENOIT, CARTER, MARTINEZ, MCCALLON, ROYBAL SALTARELLI, WINTERBOTTOM, YAMARONE.

NOES: NONE.

ACTION: MSRC Staff will amend the above contract accordingly.

Agenda Item #8 – Consider Modified Project Description for the Los Angeles County Metropolitan Transportation Authority (Metro), Contract #MS18025 (proposed) (\$1,324,560 – Provide Special Bus and Train Service to Dodger Stadium)

Metro requests to modify the train service to be provided in support of “cross-town rivalry” games with the Los Angeles Angels of Anaheim. Because the games fall Friday through Sunday, Metro proposes the use of regular Metrolink service, rather than special service, for inbound riders on Friday, July 13. Metro further proposes that the special inbound service on July 14 and 15 will originate from Laguna Niguel rather than Oceanside. There are no changes proposed to the outbound service for any of the games. The MSRC-TAC unanimously recommends approval.

ON MOTION BY MSRC MEMBER MICHELE MARTINEZ, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #2 THROUGH #8, MSRC UNANIMOUSLY VOTED TO APPROVE THE MODIFIED PROJECT DESCRIPTION FOR THE LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY, (PROPOSED) CONTRACT #MS18025.
AYES: BENOIT, CARTER, MARTINEZ, MCCALLON, ROYBAL SALTARELLI, WINTERBOTTOM, YAMARONE.
NOES: NONE.

ACTION: MSRC Staff will amend the above contract accordingly.

ACTION CALENDAR (Items 9 through 12)
FYs 2016-18 WORK PROGRAM

Agenda Item #9 – Consider Funding for Application Received under the Natural Gas Infrastructure Program

Cynthia Ravenstein, MSRC Contracts Administrator, reported the MSRC has allocated \$4 million to fund new and expanded CNG and LNG refueling stations, as well as modifications to vehicle maintenance facilities and technician training. An additional application was received from El Dorado National requesting to install a new limited access CNG station. The MSRC-TAC is recommending approval of a \$100,000 award to El Dorado National.

ON MOTION BY MSRC MEMBER MICHELE MARTINEZ AND SECONDED BY MSRC VICE-CHAIR GREG WINTERBOTTOM, THE MSRC UNANIMOUSLY VOTED TO APPROVE AN AWARD TO EL DORADO NATIONAL FOR \$100,000.
AYES: BENOIT, CARTER, MARTINEZ, MCCALLON, ROYBAL SALTARELLI, WINTERBOTTOM, YAMARONE.
NOES: NONE.

ACTION: This item will be considered by the SCAQMD Board at its June 1, 2018 meeting.

Agenda Item #10 – Consider Funding for Applications Received under the Local Government Partnership Program

Cynthia Ravenstein, MSRC Contracts Administrator, reported this is the next set of applications that were received under the Local Government Partnership Program. There are a total of six recommended awards: (1) City of Pico Rivera, for EV charging infrastructure; (2) City of Mission Viejo, for Light-duty ZEVs, EV charging infrastructure and expansion of natural gas station; (3) City of Torrance, for heavy-duty near-zero vehicles and EV charging infrastructure; (4) City of Lomita, for light-duty ZEV and bicycle active transportation; (5) City of Chino Hills, for light-duty ZEVs and EV charging infrastructure; and (6) City of Anaheim, for light-duty ZEVs and medium/heavy-duty ZEVs. The total recommended awards are \$688,900. There is an incorrect number in the agenda for the City of Chino Hills. They are proposing two light-duty ZEVs, not four, but the total dollar amount of \$30,000 is correct. We have continued to do further outreach to those who have not yet applied, and your outreach coordinator will make a last push as we approach the August 2nd deadline. There are indications that there are a lot of applications in the works.

[MSRC Alternate Brian Berkson arrived at 2:07 p.m. during discussion of this item]

MSRC Chair Larry McCallon questioned are there many that you are aware of? Ms. Ravenstein replied I am aware of many that are working on them. A lot of them of have already gone to their City Council but have not submitted their applications. Ray Gorski said we will definitely keep the outreach going using both our internal staff resources, as well as your outreach coordinator.

MSRC Vice-Chair Greg Winterbottom questioned where do we stand on the distribution? Ray Gorski, MSRC Technical Advisor replied from an accounting perspective, we're actually doing pretty well. When we go through all the projects and look at how they are dispersed throughout the area, we have representation from each geographic region.

Mr. Winterbottom inquired do we assist with anyone who needs help? Mr. Gorski replied we do assist. There are a lot of resources. South Coast AQMD's Public Affairs Department supports the program because they have individuals who directly assist the cities and counties to receive AB 2766 Subvention Funds. They have been a very active and very good partner in this. We have the outreach coordinator, The Better World Group, they are doing not only direct contact, but they also may do some calls to City leadership because we need to make sure that decision-makers are aware that this is an opportunity.

Mr. Winterbottom asked what is our major hurdle. Mr. Gorski replied when we have the next Retreat, we will have a discussion on how things went and what we learned. Trying to make it easy with complete flexibility, is not in your best interest. A lot of the city staff have demonstrated that they want a direct process and procedure to follow. We have learned that it is best to just give structure instead of trying to be as flexible as we can and give quite bit of leeway

on how to put together your project description. MSRC Chair Larry McCallon added a lot of cities are used to competing.

MSRC Member Ben Benoit asked are they having trouble with how to do it, how to pick a project or do they have trouble coming up with what they want to use it for? Mr. Gorski replied we have had several suggest projects which are not eligible. The whole intent was really to implement strategies which were identified in the 2016 Air Quality Management Plan; it has some defined categories. There needs to be outreach collectively, including the South Coast AQMD, to instruct entities that they have the ability to leverage funds. They can really make a project because there's money out there that is not being taken advantage of. HVIP funds can be leveraged with MSRC funds.

PUBLIC COMMENT: Leo Jones, CNG Transition, asked can you name a couple of the grants that are not being used much.

Mr. Gorski replied the most important is HVIP, it is a Voucher Incentive Program that is offered by the State of California. They have made \$32 million available to offset the cost of more expensive advanced technology and low-emission vehicles. There is funding that is available for low-emission natural gas engines and medium- to heavy-duty electric vehicles. There is also the CVRP Program, which is for light-duty vehicles, that you can match with the MSRC funds. If you can leverage all of the available funds, you can have a project that will not impact your general fund. There is a lack of education on how to do that. Mr. McCallon noted part of our efforts in the future should be to include those types of suggestions. Mr. Gorski replied we have those types of suggestions in there.

PUBLIC COMMENT: Leo Jones, CNG Transition asked can you name more.

Mr. Gorski replied there's a lot of funding that is going to be available. The MSRC Program has a 5-year project implementation window. There's going to be funding that will be available through the Volkswagen Settlement Fund, as well as from the SCAQMD-administered Carl Moyer Fund, which is currently open. There is funding that is going to be available in the future under the Low Carbon Programs that are under the Greenhouse Gas Reduction Funds. There are several programs that are administrated by the California Energy Commission and the California Air Resources Board which draw their funding from the Greenhouse Gas Reduction Fund. There are programs that are specifically looking at transit and active transportation. We understand that it is very confusing, but we would like to see people taking more advantage of all these programs to put together a project which will allow them to utilize their MSRC funds but also do something good for their jurisdiction.

ON MOTION BY MSRC VICE-CHAIR GREG WINTERBOTTOM AND SECONDED BY MSRC MEMBER BEN BENOIT, THE MSRC UNANIMOUSLY VOTED TO APPROVE AWARDS TO THE CITIES OF PICO RIVERA, MISSION VIEJO, TORRANCE, LOMITA, CHINO HILLS AND ANAHEIM TOTALING \$688,900. AYES: BENOIT, BERKSON, CARTER, MARTINEZ, MCCALLON, ROYBAL SALTARELLI, WINTERBOTTOM, YAMARONE. NOES: NONE.

ACTION: This item will be considered by the SCAQMD Board at its June 1, 2018 meeting

Agenda Item #11 – Consider Work Plan Received under the CTC Partnership Program

Ray Gorski, MSRC Technical Advisor reported this item is under the CTC Partnership Program. Under this program, the MSRC allocated \$8 million to implement projects that not only clean the air but have the potential to improve mobility within the South Coast Air Basin. Each of the County Transportation Commissions is eligible to receive up to \$2 million to implement programs which further the MSRC's mission. The Los Angeles Metropolitan Transportation Authority submitted an application. They would like to apply their funding towards the purchase of zero emission 60-foot buses to implement service on the Metro Orange Line Bus Rapid Transit System. These buses operate more on a guide way as opposed to regular city streets. They are used primarily for commuter transportation. The total number of buses to be purchased is 40. Los Angeles Metro will apply the \$2 million towards the initial purchase of the total 40 buses.

MSRC Alternate Brian Berkson inquired are they matching this or is this just a grant. Mr. Gorski replied the total project cost exceeds \$80 million, this will be \$2 million out of the total.

ON MOTION BY MSRC MEMBER BEN BENOIT AND SECONDED BY MSRC ALTERNATE MICHAEL CARTER, THE MSRC UNANIMOUSLY VOTED TO APPROVE AN AWARD TO LOS ANGELES METRO FOR \$2,000,000.

AYES: BENOIT, BERKSON, CARTER, MARTINEZ, MCCALLON, ROYBAL SALTARELLI, WINTERBOTTOM, YAMARONE.

NOES: NONE.

ACTION: This item will be considered by the SCAQMD Board at its June 1, 2018 meeting

MSRC-TAC MEMBERSHIP**Agenda Item #12 – Consider Appointment of Tim Olson as Primary, and Rhetta deMesa and Sam Lerman as Alternates, to the MSRC-TAC in the Position of “Air Pollution Control Expert”**

Ray Gorski, MSRC Technical Advisor, reported that by way of background, Mr. John Kato has been serving in the position of Air Pollution Control Expert on the MSRC-TAC for approximately the last 2 years. Mr. Kato has now left the California Energy Commission (CEC) and has assumed a new position at the California Air Resources Board. The CEC has expressed their desire to retain their position on the MSRC-TAC. The Air Pollution Control Expert position can be filled by any individual who has the necessary qualifications, but the CEC appreciates the MSRC's consideration of allowing them to remain part of the process for the MSRC Discretionary Fund. The CEC recommends Mr. Tim Olson to assume Mr. Kato's responsibilities as Air Pollution Control Expert on the MSRC-TAC. Mr. Olson is no stranger to the MSRC. He has worked with MSRC staff for several years and has also participated as a speaker in some workshops and retreats in the past. He works directly in areas which are of most import to the MSRC: in both zero and near zero-emission advanced technologies. To ensure that the CEC has the ability to fulfill their role, they are suggesting that two individuals be identified and accepted

to be alternates to Mr. Olson: Ms. Rhetta deMessa and Mr. Sam Lerman. They also possess the necessary qualifications and experience to meet the requirements of an Air Pollution Control Expert. In handout #12, we have included some of their biographical, historical and educational information. These individuals have long-standing participation in the MSRC process.

MSRC Chair Larry McCallon inquired is it normal to have two alternates? Mr. Gorski replied it is not unprecedented. We have had other positions in the past which have had two alternates. CEC is trying to ensure that at least one individual that represents the CEC would be available, irrespective of the circumstances.

ON MOTION BY MSRC MEMBER BEN BENOIT AND SECONDED BY MSRC MEMBER MICHELE MARTINEZ, THE MSRC UNANIMOUSLY VOTED TO APPROVE THE APPOINTMENT OF TIM OLSON AS PRIMARY AND RHETTA DEMESSA AND SAM LERMAN AS ALTERNATES TO THE MSRC-TAC POSITION OF AIR POLLUTION CONTROL EXPERT.

AYES: BENOIT, BERKSON, CARTER, MARTINEZ, MCCALLON, ROYBAL SALTARELLI, WINTERBOTTOM, YAMARONE.

NOES: NONE.

ACTION: No further action is required

Agenda Item #13 – Other Business

Ray Gorski, MSRC Technical Advisor, commented there is new leadership on your MSRC-TAC. Gretchen Hardison, who has been your long-standing MSRC-TAC Chair, relinquished her gavel and now Mr. Dan York is the Chair. The Vice-Chair is Mr. AJ Marquez, a long-standing MSRC-TAC member. We are in the process of completing workshops for the new program development process for FYs 2018-2020. We have completed three workshops and have two more. The remaining workshops will be conducted next Tuesday: one at Riverside County Transportation Commission (RCTC) and one at San Bernardino County Transportation Authority (SBCTA) headquarters. We have had good participation and good dialogue to date. The next steps will be to gather all the information that has been provided to us from those individuals who participated, and plan your next Work Program Development Retreat. At the pleasure of the committee, staff will be reaching out to the Chairman to determine potential dates and venues. We will keep all members apprised of the progress. July 1st is the start of your new two-year Work Program.

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 2:26 p.m.

NEXTMEETING

Thursday, June 21, 2018 at 2:00 p.m., Room CC8.

[Prepared by Penny Shaw Cedillo]

MSRC Agenda Item No. 3

DATE: June 21, 2018

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 April 26 to May 30, 2018.

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 executed.

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 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 executed.

On June 2, 2017, the SCAQMD Governing Board approved an award under the Event Center Transportation Program. This contract is executed.

On July 7, 2017, the SCAQMD Governing Board approved an award under the Event Center Transportation Program. This contract is executed.

On September 1, 2017, the SCAQMD Governing Board approved one award under the Event Center Transportation Program and one award under the Natural Gas Infrastructure Program. These contracts are with the prospective contractor for signature or executed.

On October 6, 2017, the SCAQMD Governing Board approved two awards under the Event Center Transportation Program and one award under the Natural Gas Infrastructure Program. These contracts are executed.

On December 1, 2017, the SCAQMD Governing Board approved sole source awards for a Hydrogen Infrastructure Partnership Program, for a Southern California Future Communities Partnership Program, and for electric vehicle charging infrastructure planning analysis. These contracts are with the prospective contractor for signature. The MSRC has replaced the award to the California Energy Commission with a Program Opportunity Notice for the Hydrogen Infrastructure Partnership Program.

On February 2, 2018, the SCAQMD Governing Board approved one award under the Event Center Transportation Program, two awards under the Natural Gas Infrastructure Program, four awards under the Local Government Partnership Program, and two awards under the County Transportation Commission Partnership Program. These contracts are under development, with the prospective contractor for signature, or executed.

On March 2, 2018, the SCAQMD Governing Board approved one award under the Major Event Center Transportation Program, two awards under the Natural Gas Infrastructure Program, and one award under the Local Government Partnership Program. These contracts are under development, undergoing internal review, or with the prospective contractor for signature.

On April 6, 2018, the SCAQMD Governing Board approved one award under the Natural Gas Infrastructure Program and eight awards under the Local Government Partnership Program. These contracts are under development, undergoing internal review, or with the prospective contractor for signature.

On May 4, 2018, the SCAQMD Governing Board approved twenty-seven awards under the Local Government Partnership Program and one award under the County Transportation Commission Partnership Program. These contracts are under development or 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 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 with the SCAQMD Board Chair 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 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 executed.

Work Program Status

Contract Status Reports for work program years with open (including "Open/Complete") and/or pending contracts are attached.

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 one is 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 2 are in “Open/Complete” status. One contract closed during this period: Los Angeles County Department of Public Works, Contract #ML08018 – Purchase Two Heavy-Duty CNG Vehicles.

FY 2007-08 Invoices Paid

No invoices were paid during this period.

FY 2008-09 Work Program Contracts

One contracts from this work program year is open; and 5 are in “Open/Complete” status. One contract passed into “Open/Complete” status during this period: City of Long Beach Fleet Services Bureau, Contract #ML09036 – Purchase 35 Natural Gas Refuse Trucks.

FY 2008-09 Invoices Paid

No invoices were paid during this period.

FY 2010-11 Work Program Contracts

4 contracts from this work program year are open; and 33 are in “Open/Complete” status. 3 contracts closed during this period: California Cartage Company, Contract #MS1101 – Retrofit Two Heavy-Duty Off-Road Vehicles; City of Glendale, Contract #ML11028 – Purchase 10 Heavy-Duty Natural Gas Vehicles; and CR&R, Contract #MS11017 – Expand CNG Station in Garden Grove.

FY 2010-11 Invoices Paid

No invoices were paid during this period.

FY 2011-12 Work Program Contracts

12 contracts from this work program year are open, and 33 are in “Open/Complete” status. One contract closed during this period: City of La Palma, Contract #ML12048 – Purchase 2 Medium-Duty LPG Vehicles.

FY 2011-12 Invoices Paid

No invoices were paid during this period.

FYs 2012-14 Work Program Contracts

35 contracts from this work program year are open, and 25 are in “Open/Complete” status. One contract closed during this period: Top Shelf Consulting, Contract #MS14089 – Enhanced Fleet Modernization Program.

FYs 2012-14 Invoices Paid

One invoice in the amount of \$125,000.00 was paid during this period.

FYs 2014-16 Work Program Contracts

74 contracts from this work program year are open, and 16 are in “Open/Complete” status. 2 contracts closed during this period: Coachella Valley Association of Governments, Contract

#ML16033 – Street Sweeping Operations in Coachella Valley; and City of Buena Park, Contract #ML16049 – Install Class I Bikeway.

FYs 2014-16 Invoices Paid

Six invoices totaling \$538,187.50 were paid during this period.

FYs 2016-18 Work Program Contracts

14 contracts from this work program year are open.

FYs 2016-18 Invoices Paid

One invoice in the amount of \$373.00 was paid during this period.

Administrative Scope Changes

3 administrative scope changes were initiated during the period of April 26 to May 30, 2018:

- County of Los Angeles, Department of Public Works, Contract #ML14026 (Install CNG Station – Castaic) – One-year no-cost term extension
- County of Riverside, Contract #ML14068 (Implement “Open Streets” Events) – Reallocate \$6,639 between tasks
- City of Irvine, Contract #ML14033 (Purchase Two Heavy-Duty Natural Gas Vehicles) – One-year no-cost term extension

Attachments

- FY 2004-05 through FYs 2016-18 (except FY 2005-06 and FY 2009-10) Contract Status Reports



AB2766 Discretionary Fund Program Invoices

April 26, 2018 to May 30, 2018

Contract Admin.	MSRC Chair	MSRC Liaison	Finance	Contract #	Contractor	Invoice #	Amount
<i>2014-2016 Work Program</i>							
5/3/2018	5/17/2018	5/18/2018	5/18/2018	ML16017	City of Long Beach	18-007	\$141,757.27
4/27/2018	4/28/2018	5/1/2018	5/1/2018	ML16064	County of Orange, OC Parks	1	\$73,585.00
4/26/2018	4/28/2018	5/1/2018	5/1/2018	MS16030	The Better World Group	1656	\$14,640.00
4/26/2018	4/28/2018	5/1/2018	5/1/2018	ML16033	Coachella Valley Association of Governments	CV18123-18	\$250,000.00
5/2/2018	5/17/2018	5/18/2018	5/18/2018	ML16078	City of Moreno Valley	18-0118/FIN.	\$26,035.23
Total: \$506,017.50							
<i>2016-2018 Work Program</i>							
5/15/2018	5/17/2018	5/18/2018	5/18/2018	MS18003	Geographics	18-20827	\$373.00
Total: \$373.00							

Total This Period: \$506,390.50



FYs 2004-05 Through 2016-18 AB2766 Contract Status Report

6/14/2018

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
<i>FY 2004-2005 Contracts</i>									
<i>Open Contracts</i>									
ML05014	Los Angeles County Department of P	5/21/2007	11/20/2008	9/20/2018	\$204,221.00	\$0.00	Traffic Signal Synchronization	\$204,221.00	No
Total: 1									
<i>Declined/Cancelled Contracts</i>									
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
Total: 6									
<i>Closed Contracts</i>									
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
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

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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
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
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

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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
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: 60

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

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
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Total: 1

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	\$270,000.00	10 H.D. Nat. Gas Vehicles	\$30,000.00	Yes
MS08013	United Parcel Service West Region	12/10/2008	10/9/2014	3/9/2019	\$480,000.00	\$432,000.00	12 H.D. Nat. Gas Yard Tractors	\$48,000.00	No

Total: 3

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
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
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
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
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
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
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

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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
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: 58

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
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
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: 3

Open/Complete Contracts

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

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 2008-2009 Contracts

Open Contracts

ML09033	City of Beverly Hills	3/4/2011	5/3/2017	1/3/2019	\$550,000.00	\$100,000.00	10 Nat. Gas Heavy-Duty Vehicles & CNG St	\$450,000.00	No
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Total: 1

Declined/Cancelled Contracts

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

Total: 11

Closed Contracts

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
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
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
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

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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
ML09038	City of Chino	9/27/2010	5/26/2017		\$250,000.00	\$250,000.00	Upgrade Existing CNG Station	\$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
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: 27

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
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
ML09035	City of Fullerton	6/17/2010	6/16/2017	6/16/2018	\$450,000.00	\$450,000.00	2 Heavy-Duty CNG Vehicles & Install CNG	\$0.00	Yes
ML09036	City of Long Beach Fleet Services B	5/7/2010	5/6/2017	11/6/2022	\$875,000.00	\$875,000.00	Purchase 35 Natural Gas Refuse 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: 5

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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FY 2010-2011 Contracts

Open Contracts

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	Purchase Heavy-Duty CNG Vehicle, Install	\$102,500.00	No
ML11045	City of Newport Beach	2/3/2012	8/2/2018	3/2/2021	\$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

Total: 4

Declined/Cancelled Contracts

ML11038	City of Santa Monica	5/18/2012	7/17/2018		\$400,000.00	\$0.00	Maintenance Facility Modifications	\$400,000.00	No
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	Cattrac 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
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: 22

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
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
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

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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
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
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
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
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
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

Total: 25

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
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

Total: 5

Open/Complete Contracts

ML11020	City of Indio	2/1/2013	3/31/2019	9/30/2020	\$15,000.00	\$9,749.50	Retrofit one H.D. Vehicles w/DECS, repower	\$5,250.50	Yes
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
ML11024	County of Los Angeles, Dept of Publi	12/5/2014	6/4/2022		\$90,000.00	\$90,000.00	Purchase 3 Nat. Gas H.D. Vehicles	\$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

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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
ML11036	City of Riverside	1/27/2012	1/26/2019	3/26/2021	\$670,000.00	\$670,000.00	Install New CNG Station, Purchase 9 H.D. N	\$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
ML11040	City of South Pasadena	5/4/2012	1/3/2019	1/3/2022	\$30,000.00	\$30,000.00	Purchase 1 Nat. Gas H.D. Vehicle	\$0.00	Yes
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	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
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: 33

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	8/17/2023	\$300,000.00	\$0.00	Expansion of Existing CNG Station	\$300,000.00	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	6/13/2022	\$400,000.00	\$0.00	Install New CNG Station	\$400,000.00	No
ML12051	City of Bellflower	2/7/2014	2/6/2016	5/6/2018	\$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	\$40,375.80	Purchase One Nat. Gas H.D. Vehicle/Street	\$17,080.20	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	\$175,000.00	Construct New Limited-Access CNG Station	\$0.00	No
MS12060	City of Santa Monica	4/4/2014	8/3/2017	8/3/2018	\$500,000.00	\$434,202.57	Implement Westside Bikeshare Program	\$65,797.43	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	\$59,454.00	Install New CNG Infrastructure	\$0.00	No
MS12084	Airport Mobil Inc.	12/6/2013	5/5/2020		\$150,000.00	\$0.00	Install New CNG Infrastructure	\$150,000.00	No

Total: 12

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				\$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
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
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-Acess 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

Total: 12

Closed Contracts

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
ML12041	City of Anaheim Public Utilities Depa	4/4/2014	11/3/2015	11/3/2017	\$68,977.00	\$38,742.16	EV Charging Infrastructure	\$30,234.84	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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 Stadium	\$88,830.00	Yes
MS12002	Orange County Transportation Authority	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 Authority	7/20/2012	2/28/2013		\$234,669.00	\$167,665.12	Implement Metrolink Service to Angel Stadium	\$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 District	12/20/2012	5/19/2014		\$75,000.00	\$75,000.00	Vehicle Maintenance Facility Modifications	\$0.00	Yes
MS12059	Orange County Transportation Authority	2/28/2013	12/27/2014		\$75,000.00	\$75,000.00	Maintenance Facilities Modifications	\$0.00	Yes
MS12061	Orange County Transportation Authority	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 Authority	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 Authority	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 Ana	\$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 Authority	12/6/2013	3/5/2016		\$125,000.00	\$18,496.50	Implement Rideshare Incentives Program	\$106,503.50	Yes
MS12089	Riverside County Transportation Company	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 Program	\$296,000.00	No

Total: 33

Closed/Incomplete Contracts

MS12079	Penske Truck Leasing Co., L.P.	1/7/2014	1/6/2016		\$75,000.00	\$0.00	Maintenance Facility Modifications - Boyle Heights	\$75,000.00	No
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Total: 1

Open/Complete Contracts

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 Sanitation	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 Transportation	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

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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
MS12011	Southern California Gas Company	6/14/2013	6/13/2019	5/28/2021	\$150,000.00	\$150,000.00	Construct New Public-Access CNG Station -	\$0.00	Yes
MS12024	Southern California Gas Company	6/13/2013	12/12/2019	11/12/2020	\$150,000.00	\$150,000.00	Construct New Public-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
MS12033	Mike Diamond/Phace Management	12/22/2012	12/21/2018	6/21/2021	\$148,900.00	\$148,900.00	Purchase 20 Medium-Heavy Duty Vehicles	\$0.00	No
MS12034	Ware Disposal Company, Inc.	11/2/2012	11/1/2018	5/1/2022	\$133,070.00	\$133,070.00	Purchase 8 Medium-Heavy Duty Vehicles	\$0.00	No
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
MS12075	CR&R Incorporated	7/27/2013	1/26/2021	1/26/2022	\$100,000.00	\$100,000.00	Expansion of Existing CNG Infrastructure	\$0.00	No
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	2/19/2023	\$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: 33

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
FY 2012-2014 Contracts									
Open Contracts									
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
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	3/6/2023	\$178,263.00	\$15,468.52	EV Charging, Bicycle Racks, Bicycle Locker	\$162,794.48	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
ML14023	County of Los Angeles Department o	10/2/2015	9/1/2017	9/1/2018	\$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	9/1/2018	\$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	5/1/2024	\$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
ML14030	County of Los Angeles Internal Servi	1/9/2015	3/8/2018	6/8/2019	\$425,000.00	\$25,000.00	Bicycle Racks, Outreach & Education	\$400,000.00	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	\$48,250.00	One HD Nat Gas Vehicle, EV Charging, Bicy	\$56,750.00	No
ML14055	City of Highland	10/10/2014	3/9/2018	3/9/2019	\$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	\$125,000.00	Bicycle Lanes	\$0.00	No
ML14060	County of Los Angeles Internal Servi	10/6/2017	1/5/2019		\$104,400.00	\$0.00	Electric Vehicle Charging Infrastructure	\$104,400.00	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	2/11/2018	\$142,096.00	\$0.00	Bicycle Trail Improvements	\$142,096.00	No
ML14067	City of Duarte	12/4/2015	1/3/2023	6/3/2024	\$60,000.00	\$0.00	Purchase Two Electric Buses	\$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
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
ML14094	City of Yucaipa	6/9/2017	6/8/2018		\$84,795.00	\$84,795.00	Installation of Bicycle Lanes	\$0.00	No
MS14001	Los Angeles County MTA	3/6/2015	4/30/2015		\$1,216,637.00	\$1,199,512.68	Clean Fuel Transit Service to Dodger Stadiu	\$17,124.32	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
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
MS14059	Riverside County Transportation Co	9/5/2014	3/4/2018	4/4/2020	\$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	3/26/2020	\$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	\$300,000.00	Expansion of Existing CNG Infrastructure/Ma	\$0.00	No
MS14076	Rialto Unified School District	6/17/2015	2/16/2022		\$225,000.00	\$225,000.00	New Public Access CNG Station	\$0.00	No
MS14079	Waste Resources, Inc.	9/14/2016	8/13/2022	8/13/2023	\$100,000.00	\$0.00	New Limited Access CNG Station	\$100,000.00	No
MS14082	Grand Central Recycling & Transfer	12/4/2015	3/3/2023	3/3/2024	\$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

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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: 35									
Declined/Cancelled Contracts									
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
MS14038	Penske Truck Leasing Co., L.P.				\$75,000.00	\$0.00	Vehicle Maint. Fac. Modifications - Fontana	\$75,000.00	No
MS14043	City of Anaheim				\$175,000.00	\$0.00	Expansion of Existing CNG Station	\$175,000.00	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
MS14085	Prologis, L.P.				\$100,000.00	\$0.00	New Limited Access CNG Station	\$100,000.00	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: 9									
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
ML14029	City of Irvine	7/11/2014	6/10/2017		\$90,500.00	\$71,056.78	Bicycle Trail Improvements	\$19,443.22	Yes
ML14054	City of Torrance	11/14/2014	4/13/2017	7/13/2017	\$350,000.00	\$319,908.80	Upgrade Maintenance Facility	\$30,091.20	Yes
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
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
MS14058	Orange County Transportation Autho	11/7/2014	4/6/2016	4/6/2017	\$1,250,000.00	\$1,250,000.00	Implement Various Signal Synchronization P	\$0.00	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
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

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
Total: 23									
Closed/Incomplete 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
Total: 1									
Open/Complete Contracts									
ML14013	City of Los Angeles, Bureau of Sanit	10/7/2016	2/6/2025		\$400,000.00	\$400,000.00	Purchase 14 H.D. Nat. Gas Vehicles	\$0.00	Yes
ML14014	City of Torrance	9/5/2014	12/4/2019		\$56,000.00	\$56,000.00	EV Charging Infrastructure	\$0.00	Yes
ML14016	City of Anaheim	4/3/2015	9/2/2021		\$380,000.00	\$380,000.00	Purchase 2 H.D. Vehicles, Expansion of Exi	\$0.00	Yes
ML14022	County of Los Angeles Department o	10/2/2015	5/1/2022		\$270,000.00	\$270,000.00	Purchase 9 H.D. Nat. Gas Vehicles	\$0.00	Yes
ML14028	City of Fullerton	9/5/2014	1/4/2022		\$126,950.00	\$126,950.00	Expansion of Existing CNG Infrastructure	\$0.00	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 Infrasa., 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
ML14051	City of Brea	9/5/2014	1/4/2017	7/4/2018	\$450,000.00	\$450,000.00	Installation of Bicycle Trail	\$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
ML14071	City of Manhattan Beach	1/9/2015	11/8/2018		\$22,485.00	\$22,485.00	Electric Vehicle Charging Infrastructure	\$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
MS14053	Upland Unified School District	1/9/2015	7/8/2021		\$175,000.00	\$175,000.00	Expansion of Existing CNG Infrastructure	\$0.00	No
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
MS14080	CR&R Incorporated	6/1/2015	8/31/2021	8/31/2022	\$200,000.00	\$200,000.00	Expansion of Existing CNG Infrastructure/Ma	\$0.00	No
MS14081	CR&R Incorporated	6/1/2015	5/30/2021		\$175,000.00	\$100,000.00	Expansion of Existing CNG Infrastructure/Ma	\$75,000.00	No
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: 25									

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
FY 2014-2016 Contracts									
Open Contracts									
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	\$210,000.00	Purchase 7 H.D. Nat. Gas Vehicles, EV Cha	\$36,000.00	No
ML16008	City of Pomona	9/20/2016	11/19/2022	11/19/2023	\$60,000.00	\$0.00	Purchase 4 Medium-Duty and 9 Heavy-Duty	\$60,000.00	No
ML16009	City of Fountain Valley	10/6/2015	2/5/2018	2/5/2019	\$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
ML16013	City of Monterey Park	12/4/2015	7/3/2022	7/3/2023	\$90,000.00	\$0.00	Purchase 3 Heavy-Duty Nat. Gas Vehicles	\$90,000.00	No
ML16016	City of Los Angeles, Department of	2/5/2016	12/4/2022		\$630,000.00	\$540,000.00	Purchase 21 Heavy-Duty Nat. Gas Vehicles	\$90,000.00	No
ML16017	City of Long Beach	2/5/2016	8/4/2023		\$1,445,400.00	\$951,400.00	Purchase 50 Medium-Duty, 19 H.D. Nat. Ga	\$494,000.00	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	8/1/2018	\$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
ML16022	Los Angeles Department of Water an	5/5/2017	3/4/2024		\$360,000.00	\$0.00	Purchase 13 H.D. Nat. Gas Vehicles	\$360,000.00	No
ML16025	City of South Pasadena	6/22/2016	4/21/2023		\$180,535.00	\$0.00	Purchase H.D. Nat. Gas Vehicle, Expand Ex	\$180,535.00	No
ML16032	City of Azusa	9/9/2016	4/8/2019	4/8/2020	\$474,925.00	\$0.00	Implement a "Complete Streets" Pedestrian	\$474,925.00	No
ML16034	City of Riverside	3/11/2016	10/10/2018	10/10/2019	\$500,000.00	\$0.00	Implement a "Complete Streets" Pedestrian	\$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	1/2/2021	1/2/2022	\$20,000.00	\$0.00	Install EV Charging Infrastructure	\$20,000.00	No
ML16042	City of San Dimas	4/1/2016	12/31/2019	12/31/2020	\$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	5/31/2023	\$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
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
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	9/22/2021	\$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
ML16060	City of Cudahy	2/5/2016	10/4/2017		\$73,910.00	\$0.00	Implement an "Open Streets" Event	\$73,910.00	No

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML16064	County of Orange, OC Parks	2/21/2017	10/20/2018		\$204,073.00	\$73,585.00	Implement "Open Streets" Events with Vario	\$130,488.00	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	\$84,106.00	Implement an "Open Streets" Events with V	\$87,542.00	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	\$90,000.00	Purchase 3 H.D. Nat. Gas Vehicles	\$0.00	No
ML16071	City of Highland	5/5/2017	1/4/2020		\$264,500.00	\$0.00	Implement a "Complete Streets" Pedestrian	\$264,500.00	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
ML16077	City of Rialto	5/3/2018	10/2/2021		\$463,216.00	\$0.00	Pedestrian Access Improvements, Bicycle L	\$463,216.00	No
ML16083	City of El Monte	4/1/2016	4/30/2021	4/30/2023	\$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	\$1,332,039.84	Clean Fuel Transit Service to Dodger Stadiu	\$17,960.16	No
MS16029	Orange County Transportation Autho	1/12/2018	6/11/2020		\$851,883.00	\$0.00	Transportation Control Measure Partnership	\$851,883.00	No
MS16030	The Better World Group	12/19/2015	12/31/2017	12/31/2019	\$256,619.00	\$119,288.69	Programmic Outreach Services to the MSR	\$137,330.31	No
MS16082	Riverside County Transportation Co	9/3/2016	8/2/2018		\$590,759.00	\$257,160.13	Extended Freeway Service Patrols	\$333,598.87	No
MS16086	San Bernardino County Transportatio	9/3/2016	10/2/2021		\$800,625.00	\$143,833.05	Freeway Service Patrols	\$656,791.95	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
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	\$84,744.00	Implement a Series of "Open Streets" Event	\$165,256.00	No
MS16093	Orange County Transportation Autho	9/3/2016	3/2/2018	9/2/2018	\$1,553,657.00	\$0.00	Implement a Mobile Ticketing System	\$1,553,657.00	No
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	\$50,000.00	Provide Special Bus Service to the Los Ange	\$0.00	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	\$90,000.00	Construct a Limited-Access CNG Station	\$10,000.00	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
MS16110	City of Riverside	10/6/2017	2/5/2025		\$300,000.00	\$0.00	Expansion of Existing CNG Station and Mai	\$300,000.00	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
MS16113	Los Angeles County MTA	5/12/2017	4/11/2024		\$1,875,000.00	\$0.00	Repower Up to 125 Transit Buses	\$1,875,000.00	No
MS16114	City of Norwalk	3/3/2017	6/2/2024		\$45,000.00	\$32,170.00	Repower 3 Transit Buses	\$12,830.00	No
MS16115	City of Santa Monica	4/14/2017	7/13/2025		\$870,000.00	\$0.00	Repower 58 Transit Buses	\$870,000.00	No
MS16117	Omnitrans	4/21/2017	6/20/2023		\$175,000.00	\$166,250.00	Expansion of Existing CNG Infrastructure	\$8,750.00	No
MS16118	Omnitrans	4/21/2017	6/20/2023		\$175,000.00	\$166,250.00	Expansion of Existing CNG Infrastructure	\$8,750.00	No
MS16119	Omnitrans	4/21/2017	8/20/2022		\$150,000.00	\$0.00	New Public Access CNG Station	\$150,000.00	No
MS16120	Omnitrans	4/7/2017	5/6/2025		\$945,000.00	\$0.00	Repower 63 Existing Buses	\$945,000.00	No
MS16121	Long Beach Transit	11/3/2017	4/2/2024		\$600,000.00	\$0.00	Purchase 40 New Transit Buses with Near-Z	\$600,000.00	No

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
Total: 71									
Pending Execution Contracts									
ML16122	City of Wildomar				\$500,000.00	\$0.00	Install Bicycle Lanes	\$500,000.00	No
MS16106	City of Lawndale				\$175,000.00	\$0.00	Expansion of Existing CNG Infrastructure	\$175,000.00	No
MS16111	VNG 5703 Gage Avenue, LLC				\$150,000.00	\$0.00	Construct Public Access CNG Station in Pla	\$150,000.00	No
Total: 3									
Declined/Cancelled Contracts									
ML16014	City of Dana Point				\$153,818.00	\$0.00	Extend an Existing Class 1 Bikeway	\$153,818.00	No
ML16065	City of Temple City				\$500,000.00	\$0.00	Implement a "Complete Streets" Pedestrian	\$500,000.00	No
ML16067	City of South El Monte				\$73,329.00	\$0.00	Implement an "Open Streets" Event	\$73,329.00	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
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
MS16104	City of Perris				\$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
Total: 11									
Closed Contracts									
ML16015	City of Yorba Linda	3/4/2016	11/3/2017		\$85,000.00	\$85,000.00	Install Bicycle Lanes	\$0.00	No
ML16026	City of Downey	5/6/2016	9/5/2017		\$40,000.00	\$40,000.00	Install EV Charging Infrastructure	\$0.00	No
ML16028	City of Azusa	9/9/2016	4/8/2018		\$25,000.00	\$25,000.00	Enhance Existing Class 1 Bikeway	\$0.00	Yes
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
ML16033	Coachella Valley Association of Gov	4/27/2016	4/26/2018		\$250,000.00	\$250,000.00	Street Sweeping Operations in Coachella Va	\$0.00	Yes
ML16035	City of Wildomar	4/1/2016	11/1/2017		\$500,000.00	\$0.00	Install Bicycle Lanes	\$500,000.00	No
ML16049	City of Buena Park	4/1/2016	11/30/2018		\$429,262.00	\$429,262.00	Installation of a Class 1 Bikeway	\$0.00	Yes
ML16051	City of South Pasadena	2/12/2016	1/11/2017	12/11/2017	\$320,000.00	\$258,691.25	Implement "Open Streets" Event with Variou	\$61,308.75	Yes
ML16073	City of Long Beach Public Works	1/13/2017	7/12/2017		\$50,000.00	\$50,000.00	Implement an "Open Streets" Event	\$0.00	Yes
ML16078	City of Moreno Valley	5/6/2016	11/5/2017	5/5/2018	\$32,800.00	\$31,604.72	Install Bicycle Infrastructure & Implement Bi	\$1,195.28	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
MS16004	Mineral LLC	9/4/2015	7/3/2017	1/3/2018	\$27,690.00	\$9,300.00	Design, Develop, Host and Maintain MSRC	\$18,390.00	Yes
MS16084	Transit Systems Unlimited, Inc.	5/6/2016	2/28/2018		\$565,600.00	\$396,930.00	Implement Special Shuttle Service from Uni	\$168,670.00	No
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
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	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	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
MS16100	Southern California Regional Rail Au	5/5/2017	9/30/2017		\$80,455.00	\$66,169.43	Provide Metrolink Service to Autoclub Speed	\$14,285.57	Yes

Total: 18

Open/Complete Contracts

ML16011	City of Claremont	10/6/2015	6/5/2022		\$90,000.00	\$90,000.00	Purchase 3 Heavy-Duty Nat. Gas Vehicles	\$0.00	Yes
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	Yes
ML16023	City of Banning	12/11/2015	12/10/2021		\$30,000.00	\$30,000.00	Purchase 1 H.D. Nat. Gas Vehicle	\$0.00	Yes
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	Yes
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
ML16050	City of Westminster	5/6/2016	7/5/2020	5/5/2022	\$115,000.00	\$93,925.19	Installation of EV Charging Infrastructure	\$21,074.81	No
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
ML16059	City of Burbank	4/1/2016	2/28/2022		\$180,000.00	\$180,000.00	Purchase 6 H.D. Nat. Gas Vehicles	\$0.00	No
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
ML16062	City of Colton	6/3/2016	7/2/2020		\$25,000.00	\$21,003.82	Installation of EV Charging Infrastructure	\$3,996.18	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
ML16072	City of Palm Desert	3/4/2016	1/4/2020	1/3/2022	\$56,000.00	\$56,000.00	Installation of EV Charging Infrastructure	\$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
MS16088	Transit Systems Unlimited, Inc.	5/12/2017	1/11/2023		\$17,000.00	\$17,000.00	Expansion of Existing CNG Station	\$0.00	Yes
MS16116	Riverside Transit Agency	3/3/2017	1/2/2023		\$10,000.00	\$9,793.00	Repower One Transit Bus	\$207.00	No

Total: 17

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

ML18019	City of Hidden Hills	5/3/2018	5/2/2022		\$49,999.00	\$10,000.00	Purchase Two Light-Duty ZEVs and EVSE	\$39,999.00	No
ML18020	City of Colton	5/3/2018	4/2/2024		\$67,881.00	\$0.00	Purchase One Medium-Duty and One Heavy	\$67,881.00	No
ML18021	City of Signal Hill	4/6/2018	1/5/2022		\$49,661.00	\$0.00	Install EVSE	\$49,661.00	No
ML18022	City of Desert Hot Springs	5/3/2018	1/2/2020		\$50,000.00	\$0.00	Traffic Signal and Synchronization Project	\$50,000.00	No
MS18001	Los Angeles County MTA	6/29/2017	4/30/2018		\$807,945.00	\$0.00	Provide Clean Fuel Transit Service to Dodge	\$807,945.00	No
MS18002	Southern California Association of G	6/9/2017	11/30/2018		\$2,500,000.00	\$0.00	Regional Active Transportation Partnership	\$2,500,000.00	No
MS18003	Geographics	2/21/2017	2/20/2021		\$56,953.00	\$47,879.86	Design, Host and Maintain MSRC Website	\$9,073.14	No
MS18004	Orange County Transportation Autho	8/3/2017	4/30/2019		\$503,272.00	\$0.00	Provide Special Rail Service to Angel Stadiu	\$503,272.00	No
MS18005	Orange County Transportation Autho	1/5/2018	4/30/2019		\$834,222.00	\$405,709.29	Clean Fuel Bus Service to OC Fair	\$428,512.71	No
MS18006	Anaheim Transportation Network	10/6/2017	2/28/2020		\$219,564.00	\$0.00	Implement Anaheim Circulator Service	\$219,564.00	No
MS18008	Foothill Transit	1/12/2018	3/31/2019		\$100,000.00	\$0.00	Special Transit Service to LA County Fair	\$100,000.00	No
MS18010	Southern California Regional Rail Au	12/28/2017	7/31/2019		\$351,186.00	\$0.00	Implement Special Metrolink Service to Unio	\$351,186.00	No
MS18011	Southern California Regional Rail Au	2/9/2018	6/30/2018		\$239,565.00	\$0.00	Special Train Service to Festival of Lights	\$239,565.00	No
MS18012	City of Hermosa Beach	2/2/2018	2/1/2024		\$36,000.00	\$0.00	Construct New Limited-Access CNG Station	\$36,000.00	No

Total: 14

Pending Execution Contracts

ML18028	City of Artesia				\$50,000.00	\$0.00	Install EVSE	\$50,000.00	No
ML18030	City of Grand Terrace				\$45,000.00	\$0.00	Install EVSE	\$45,000.00	No
ML18031	City of Diamond Bar				\$73,930.00	\$0.00	Install EVSE, Purchase up to 2-LD Vehicles	\$73,930.00	No
ML18032	City of Arcadia				\$74,650.00	\$0.00	Purchase 1-HD ZEV & 1-HD Near-ZEV	\$74,650.00	No
ML18033	City of Duarte				\$50,000.00	\$0.00	Purchase 1-HD ZEV	\$50,000.00	No
ML18034	City of Calabasas				\$50,000.00	\$0.00	Install EVSE	\$50,000.00	No
ML18035	City of Westlake Village				\$50,000.00	\$0.00	Install EVSE	\$50,000.00	No
ML18036	City of Indian Wells				\$50,000.00	\$0.00	Install EVSE	\$50,000.00	No
ML18037	City of Westminster				\$120,900.00	\$0.00	Install EVSE, Purchase up to 3-LD ZEV & 1-	\$120,900.00	No
ML18038	City of Anaheim				\$221,500.00	\$0.00	Purchase 5 Light-Duty ZEVs and Install EVS	\$221,500.00	No
ML18039	City of Redlands				\$87,000.00	\$0.00	Purchase 1 Medium/Heavy-Duty ZEV and In	\$87,000.00	No
ML18040	City of Agoura Hills				\$50,000.00	\$0.00	Install EV Charging Infrastructure	\$50,000.00	No
ML18041	City of West Hollywood				\$50,000.00	\$0.00	Install EV Charging Infrastructure	\$50,000.00	No
ML18042	City of San Fernando				\$10,000.00	\$0.00	Purchase 1 Light-Duty ZEV	\$10,000.00	No
ML18043	City of Yorba Linda				\$87,990.00	\$0.00	Install EV Charging Infrastructure	\$87,990.00	No
ML18044	City of Malibu				\$50,000.00	\$0.00	Install EV Charging Infrastructure	\$50,000.00	No
ML18045	City of Culver City Transportation De				\$51,000.00	\$0.00	Purchase 8 Heavy-Duty Near-ZEVs	\$51,000.00	No
ML18046	City of Santa Ana				\$365,000.00	\$0.00	Purchase 6 Light-Duty ZEVs, 9 Heavy-Duty	\$365,000.00	No

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML18047	City of Whittier				\$113,910.00	\$0.00	Purchase 5 Heavy-Duty Near ZEVs	\$113,910.00	No
ML18048	City of Lynwood				\$93,500.00	\$0.00	Purchase Up to 3 Medium H.D. Zero-Emissi	\$93,500.00	No
ML18049	City of Downey				\$148,260.00	\$0.00	Install EVSE	\$148,260.00	No
ML18050	City of Irvine				\$330,490.00	\$0.00	Purchase 1 Medium/Heavy-Duty ZEV and In	\$330,490.00	No
ML18051	City of Rancho Cucamonga				\$227,040.00	\$0.00	Purchase 9 Light-Duty ZEVs, 2 Med-Duty Z	\$227,040.00	No
ML18052	City of Garden Grove				\$53,593.00	\$0.00	Purchase 4 L.D. ZEVs and Infrastructure	\$53,593.00	No
ML18053	City of Paramount				\$72,580.00	\$0.00	Install EV Charging Infrastructure	\$72,580.00	No
ML18054	City of La Habra Heights				\$9,200.00	\$0.00	Purchase 1 L.D. ZEV	\$9,200.00	No
ML18055	City of Long Beach Fleet Services B				\$622,220.00	\$0.00	Install EVSE	\$622,220.00	No
ML18056	City of Chino				\$103,868.00	\$0.00	Install EV Charging Infrastructure	\$103,868.00	No
ML18057	City of Carson				\$106,250.00	\$0.00	Purchase 5 Zero-Emission Vehicles and Infr	\$106,250.00	No
ML18058	City of Perris				\$86,174.00	\$0.00	Purchase 1 Med. H.D. ZEV and EV Chargin	\$86,174.00	No
ML18059	City of Glendale Water & Power				\$260,500.00	\$0.00	Install Electric Vehicle Charging Infrastructur	\$260,500.00	No
ML18060	County of Los Angeles Internal Servi				\$1,367,610.00	\$0.00	Purchase 29 Light-Duty ZEVs, 1 Med/Heavy	\$1,367,610.00	No
ML18061	City of Moreno Valley				\$25,000.00	\$0.00	Purchase 1 Heavy-Duty Near-ZEV	\$25,000.00	No
ML18062	City of Beaumont				\$25,000.00	\$0.00	Purchase 1 Heavy-Duty Near-ZEV	\$25,000.00	No
ML18063	City of Riverside				\$383,610.00	\$0.00	Expand Existing CNG Fueling Station	\$383,610.00	No
ML18064	City of Eastvale				\$80,400.00	\$0.00	Purchase 2 Med. H.D. Zero Emission Vehicl	\$80,400.00	No
ML18067	City of Pico Rivera				\$83,500.00	\$0.00	Instal EVSE	\$83,500.00	No
ML18068	City of Mission Viejo				\$115,690.00	\$0.00	Purchase 2 Light-Duty ZEVs, Install EVSE &	\$115,690.00	No
ML18069	City of Torrance				\$187,400.00	\$0.00	Purchase 4 Heavy-Duty Near ZEV and Instal	\$187,400.00	No
ML18070	City of Lomita				\$32,750.00	\$0.00	Purchase 1 Light-Duty ZEV, Install Bike Rac	\$32,750.00	No
ML18071	City of Chino Hills				\$30,000.00	\$0.00	Purchase 2 Light-Duty ZEVs and Install EVS	\$30,000.00	No
ML18072	City of Anaheim				\$239,560.00	\$0.00	Purchase 9 Light-Duty ZEVs & 2 Med/Hvy-D	\$239,560.00	No
MS18009	Penske Truck Leasing Co., L.P.				\$82,500.00	\$0.00	Modify Maintenance Facility & Train Technici	\$82,500.00	No
MS18014	Regents of the University of Californi				\$254,795.00	\$0.00	Planning for EV Charging Infrastructure Inve	\$254,795.00	No
MS18015	Southern California Association of G				\$2,000,000.00	\$0.00	Southern California Future Communities Par	\$2,000,000.00	No
MS18016	Southern California Regional Rail Au				\$87,764.00	\$0.00	Special Train Service to Auto Club Speedwa	\$87,764.00	No
MS18017	City of Banning				\$225,000.00	\$0.00	Expansion of Existing CNG Infrastructure	\$225,000.00	No
MS18018	City of Norwalk				\$75,000.00	\$0.00	Vehicle Maintenance Facility Modifications	\$75,000.00	No
MS18023	Riverside County Transportation Co				\$500,000.00	\$0.00	Weekend Freeway Service Patrols	\$500,000.00	No
MS18024	Riverside County Transportation Co				\$1,500,000.00	\$0.00	Vanpool Incentive Program	\$1,500,000.00	No
MS18025	Los Angeles County MTA				\$1,324,560.00	\$0.00	Special Bus and Train Service to Dodger Sta	\$1,324,560.00	No
MS18026	Omnitrans				\$83,000.00	\$0.00	Modify Vehicles Maintenance Facility and Tr	\$83,000.00	No
MS18027	City of Gardena				\$365,000.00	\$0.00	Install New Limited Access CNG, Modify Mai	\$365,000.00	No
MS18029	Irvine Ranch Water District				\$190,000.00	\$0.00	Install New Limited Access CNG Station & T	\$190,000.00	No
MS18065	San Bernardino County Transportatio				\$2,000,000.00	\$0.00	Implement Metrolink Line Fare Discount Pro	\$2,000,000.00	No

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
MS18066	El Dorado National				\$100,000.00	\$0.00	Install New Limited-Access CNG Station	\$100,000.00	No
MS18073	Los Angeles County MTA				\$2,000,000.00	\$0.00	Purchase 40 Zero-Emission Transit Buses	\$2,000,000.00	No

Total: 57

Declined/Cancelled Contracts

MS18013	California Energy Commission				\$3,000,000.00	\$0.00	Advise MSRC and Administer Hydrogen Infr	\$3,000,000.00	No
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Total: 1

[↑ Back to Agenda](#)

BOARD MEETING DATE: July 6, 2018

AGENDA NO. 24

REPORT: California Air Resources Board Monthly Meeting

SYNOPSIS: The California Air Resources Board met on May 25, 2018, in Sacramento, CA. The following is a summary of the meeting.

RECOMMENDED ACTION:
Receive and file.

Judith Mitchell, Member
SCAQMD Governing Board

dg

The California Air Resources Board's (CARB or Board) held a meeting on May 25, 2018 in Sacramento at the California Environmental Protection Agency Headquarters Building. Key items presented are summarized below.

DISCUSSION ITEMS

18-4-1: Public Meeting to Consider the PM2.5 State Implementation Plan for Imperial County

The Board approved the Imperial County State Implementation Plan addressing the annual 12 ug/m³ PM_{2.5} standard (2018 PM_{2.5} Plan). The 2018 PM_{2.5} Plan demonstrates that Imperial County will attain the PM_{2.5} standard in 2021 absent cross-border emissions from Mexicali, Mexico. In addition, the Plan identifies several rules the Imperial County Air Pollution Control District proposes to adopt to reduce PM_{2.5} emissions on the Imperial County side of the U.S.-Mexico border. CARB will submit the 2018 PM_{2.5} Plan to U.S. EPA as a revision to the California State Implementation Plan. The Board also heard an update on efforts by the Mexican government to reduce cross-border PM impacts from Mexicali. The Board directed staff to report back in October on an Imperial County-Mexicali work plan containing actions to improve air quality at the border.

18-4-2: Public Hearing to Consider Proposed Amendments to the Consumer Products Regulation and Method 310

The Board approved amendments to the consumer products regulation that establish an alternate compliance option for multi-purpose lubricant (MPL) products, prohibit high Global Warming Potential compounds in MPL products, and extend the effective date of the 10 percent by weight *volatile organic compounds* (VOC) limit to July 1, 2019. The amendments achieve three objectives: First, to maintain the ozone air quality benefits from consumer products claimed in the State Implementation Plan that the 10 percent VOC limit is expected to achieve by allowing manufacturers to meet an ozone reactivity-based, rather than mass-based, standard; Second, to provide compliance flexibility to manufacturers that would enable them to continue to offer effective products to consumers and still achieve similar ozone air quality benefits to those that comply with the mass-based 10 percent by weight VOC limit; Third, to achieve these objectives without significantly impacting compliance costs or increasing the cost of MPL products on the market. The Board also approved amendments to CARB Test Method 310 that will improve the clarity of the test method.

18-4-3: Public Hearing to Consider Proposed Amendments to the Heavy-Duty Vehicle Inspection Program and Periodic Smoke Inspection Program

The Board approved amendments to the Heavy-Duty Vehicle Inspection Program (HDVIP) and the Periodic Smoke Inspection Program (PSIP). The HDVIP allows CARB enforcement staff to inspect heavy-duty (HD) trucks and buses for compliance with opacity limits, labeling, and other requirements. The PSIP requires California HD diesel vehicle fleets to annually test their vehicles for compliance with the opacity limits. The approved amendments lower the allowable opacity limit for HD vehicles operating in California for both the HDVIP and PSIP, establish reporting requirements for the PSIP, require smoke tester training, and allow 2013 model year and newer engines to report on-board diagnostic data in lieu of performing the annual PSIP smoke test.

18-4-5: Public Meeting to Consider California's Beneficiary Mitigation Plan for the Volkswagen Environmental Mitigation Trust

The Board approved California's Beneficiary Mitigation Plan (Plan) for the Volkswagen (VW) Environmental Mitigation Trust (Trust). The Trust is an element of the VW settlement and is intended to fully mitigate the lifetime excess oxides of nitrogen (NOx) emissions caused by the subject VW diesel vehicles. The Plan describes the proposed mitigation actions to be funded from California's \$423 million allocation of the \$3 billion national Trust. The Plan balances investment to fully mitigate NOx with the

state's long-term air quality, climate change, zero-emission vehicle deployment, and petroleum reduction goals. Projects in the Plan include funding for zero-emission school and shuttle buses, freight and drayage trucks, and projects targeting freight and marine facilities. Senate Bill 92, passed in June 2017, requires CARB to ensure that at least 35 percent of the state's allocation benefits disadvantaged or low-income communities. Staff reported that 50 to 75 percent of the funds allocated to California will go to projects benefiting disadvantaged or low-income communities. The Plan will also fund light-duty zero-emission vehicle infrastructure in California.

Attachment

CARB May 25, 2018 Meeting Agenda



PUBLIC MEETING AGENDA

Friday, May 25, 2018

LOCATION:

California Environmental Protection Agency
California Air Resources Board
Byron Sher Auditorium, 2nd 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>

**Friday
May 25, 2018
9:00 a.m.**

DISCUSSION ITEMS:

Note: The following agenda items may be heard in a different order at the Board meeting.

Agenda Item

18-4-1: Public Meeting to Consider the PM2.5 State Implementation Plan for Imperial County

Spanish translation will be provided at the Board Meeting for this item, Item 18-4-1.

The Board will consider adopting the PM2.5 State Implementation Plan (Plan) for Imperial County for the annual 12 ug/m³ PM2.5 standard. If adopted, the California Air Resources Board will submit the Plan to the United States Environmental Protection Agency as a revision to the California State Implementation Plan.

[More Information](#)

[Staff Presentation](#)

18-4-2: Public Hearing to Consider Proposed Amendments to the Consumer Products Regulation and Method 310

The Board will consider staff's proposed amendments to the consumer products regulation to establish an alternate compliance option for multi-purpose lubricant (MPL) products. The amendments would achieve three objectives: First, to maintain the ozone air quality benefits of the 1.27 ton per day reductions in VOC emissions claimed in the State Implementation Plan (SIP) that the 10 percent VOC limit would achieve. Second, to provide compliance flexibility to manufacturers that would enable them to continue to offer effective products to consumers by achieving similar ozone air quality benefits to those that comply with the mass-based 10 percent by weight VOC limit. Third, to achieve these objectives without significantly impacting compliance costs or increasing the cost of MPL products on the market. The Board will also hear proposed amendments to CARB Test Method 310 that will improve the clarity of the test method, update publication dates of test methods previously incorporated by reference, and include additional reference methods for the purposes of implementing the alternate compliance option.

[More Information](#)

[Staff Presentation](#)

18-4-3: Public Hearing to Consider Proposed Amendments to the Heavy-Duty Vehicle Inspection Program and Periodic Smoke Inspection Program

The Board will consider proposed amendments to the Heavy-Duty Vehicle Inspection Program (HDVIP) and the Periodic Smoke Inspection Program (PSIP). The HDVIP allows CARB enforcement staff to inspect HD trucks and buses for compliance with opacity limits, labeling, and other requirements. The PSIP requires California HD diesel vehicle fleets to annually test their vehicles for compliance with the opacity limits. The proposed amendments lower the allowable opacity limit for HD vehicles operating in California for both the HDVIP and PSIP, establish reporting requirements for the PSIP and smoke tester training requirements, and allow 2013 model year and newer engines to report on-board diagnostic data in lieu of performing the annual PSIP smoke test.

[More Information](#)

[Staff Presentation](#)

18-4-4: Public Meeting to Consider California's Beneficiary Mitigation Plan for the Volkswagen Environmental Mitigation Trust

The Board will consider approval of California's Beneficiary Mitigation Plan for the Volkswagen (VW) Environmental Mitigation Trust. The Plan describes the proposed mitigation actions to be funded from California's \$423 million allocation of the \$3 billion national Trust. The Trust is an element of the VW settlement and is intended to fully mitigate the lifetime excess oxides of nitrogen (NOx) emissions caused by the subject VW diesel vehicles. Staff's proposal includes funding for heavy-duty vehicle and equipment replacements, freight and marine projects, and light-duty zero-emission vehicle infrastructure. In addition to fully mitigating the excess NOx, the proposed funding will support the State's air quality, climate change, zero-emission vehicle deployment, and petroleum reduction goals. Senate Bill 92, passed in June 2017, requires CARB to strive to ensure at least 35 percent of the State's allocation benefit disadvantaged or low-income communities. Staff expects at least 50 percent of the proposed project allocations will benefit disadvantaged or low-income communities.

[More Information](#)

[Staff Presentation](#)

CLOSED SESSION

The Board may 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 Air Resources Board v. United States Environmental Protection Agency, U.S. Court of Appeals, District of Columbia Circuit, Case No. 18-1085.

Electric Power Supply Association, et al. v. Star, et al., U.S. Court of Appeals, Seventh Circuit, Case No. 17-2445.

In re La Paloma Generating Company, LLC, U.S. Bankruptcy Court, District of Delaware, Case No. 16-bk-12700.

Mexichem Fluor Inc. v. United States Environmental Protection Agency et al., U.S. Court of Appeals, District of Columbia Circuit, Case Nos. 15-1328 and 15-1329.

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; Orange County Superior Court, Case No. 30-2018-00970852-CU-IP-CXC.

State of California, et al. v. United States Environmental Protection Agency, U.S. Court of Appeals, District of Columbia Circuit, Case No. 18-1114.

State of California, et al. v. United States Bureau of Land Management, et al., U.S. District Court, Northern District of California Circuit, Case No. 3:17-cv-07186-WHO.

State of New York, et al. v. United States Environmental Protection Agency, U.S. District Court, District of Columbia, Case No. 1:18-cv-00773.

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.

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.

Valero Refining Co. California v. Hearing Board of the Bay Area Air Quality Management District et al., Court of Appeal, First Appellate District, Case No. A151004.

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.

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.

State of California, et al. v. United States Environmental Protection Agency et al., U.S. District Court, Northern District of California, Oakland Division, Case No. 4:17-cv-6936-HSG.

States of New York, California, Vermont, and Maryland, and the Commonwealth of Pennsylvania v. National Highway Traffic Safety Administration, U.S. Court of Appeals, Second Circuit, Case Nos. 17-2780(L) and 17-2806.

State of New York, et al. v. United States Environmental Protection Agency et al., U.S. Court of Appeals, District of Columbia Circuit, Case No. 17-1185.

California Air Resources Board v. Adam Brothers Farming Inc., Santa Barbara County Superior Court, Case No. 16CV01758.

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).

Friends of Oceano Dunes, Inc. v. California Coastal Commission, et al., San Luis Obispo County Superior Court, Case No. 17CV-0576; U.S. District Court for the Central District of California, Case No. 2:17-cv-8733.

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 CARB 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 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, 23rd Floor, Sacramento, California 95814

(916) 322-5594

CARB Homepage: 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: July 6, 2018

AGENDA NO. 25

PROPOSAL: Recommend Communities and Initial Implementation Schedule for Assembly Bill 617

SYNOPSIS: Assembly Bill (AB) 617 requires CARB, in consultation with air districts, to select communities for community air monitoring and/or the preparation of community emission reduction programs. AB 617 specifies that the highest priority areas shall be disadvantaged communities with a high cumulative exposure burden for criteria pollutants and/or toxic air contaminants. Staff has conducted significant public outreach and gathered community input on key factors to consider in prioritizing communities for this program. Public input was integrated in developing an approach to evaluate technical data and other community information to prioritize communities within SCAQMD's jurisdiction with local air quality issues that also experience significant socioeconomic burdens and other factors that may increase vulnerability or sensitivity to the effects of environmental pollution. This action is to seek approval to submit recommendations to CARB for their consideration in selecting communities for the initial implementation of AB 617.

COMMITTEE: Stationary Source, June 15, 2018, Reviewed

RECOMMENDED ACTIONS:

1. Approve recommendations for the implementation schedule for AB 617 communities, including the selection of Year 1 communities.
2. Approve the draft report to be submitted to CARB, with minor updates to the report in order to comply with CARB guidance and to provide additional information in the community profiles.

Wayne Nastri
Executive Officer

Background

Assembly Bill (AB) 617 is a newly passed law focused on addressing air pollution issues in environmental justice communities. This law requires the California Air Resources Board (CARB), in consultation with air districts, to select geographically diverse communities with different types of challenges for community air monitoring and/or the preparation of community emission reduction programs, so they can be a model for the rest of the program. AB 617 specifies that the highest priority areas shall be disadvantaged communities with a high cumulative exposure burden for criteria pollutants and/or toxic air contaminants.

Staff has worked to identify high cumulative exposure burden areas within the SCAQMD's jurisdiction, and recommends an implementation schedule for these communities. To identify and prioritize these communities, staff has developed a systematic approach that utilizes existing screening tools, air pollution monitoring data, and public input. This approach focuses on identifying areas with high pollution levels that also have high socioeconomic burdens and vulnerabilities. Public input was thoughtfully considered and integrated into the community identification and prioritization process.

This new law requires that by October 1, 2018, CARB must select locations across the state for the preparation of community emission reduction programs and/or for conducting community air monitoring. To meet this deadline, air districts must submit recommendations to CARB staff by July 31, 2018. CARB expects to select 5 to 10 communities statewide for the implementation of AB 617 in Year 1, with an emphasis on selecting communities where programs can be implemented rapidly, and where existing partnerships, local resources, and community engagement can assist with developing statewide models for future community plans.

In June 2018, CARB released their Draft Blueprint and Draft Process and Criteria for the 2018 Community Selections. Because these documents are still in draft form, staff may need to make adjustments to SCAQMD's draft report in order to comply with this guidance. A draft of the report to CARB is included as Attachment 1.

Summary of Public Process

Outreach

Public input was a key element in identifying the most heavily burdened communities within SCAQMD's jurisdiction, and in identifying factors to use in prioritizing communities. Between February and June 2018, staff held 10 evening AB 617 community meetings, a Technical Workshop, two Stationary Source Committee meetings, and presented information about AB 617 at dozens of other community meetings and government agency meetings.

Specialized outreach materials were developed including infographics, FAQs, social media graphics, flyers, community self-recommendation forms, and a dedicated webpage with interactive maps. All printed materials and most electronic materials were provided in English and Spanish, and Spanish translation was provided at community meetings.

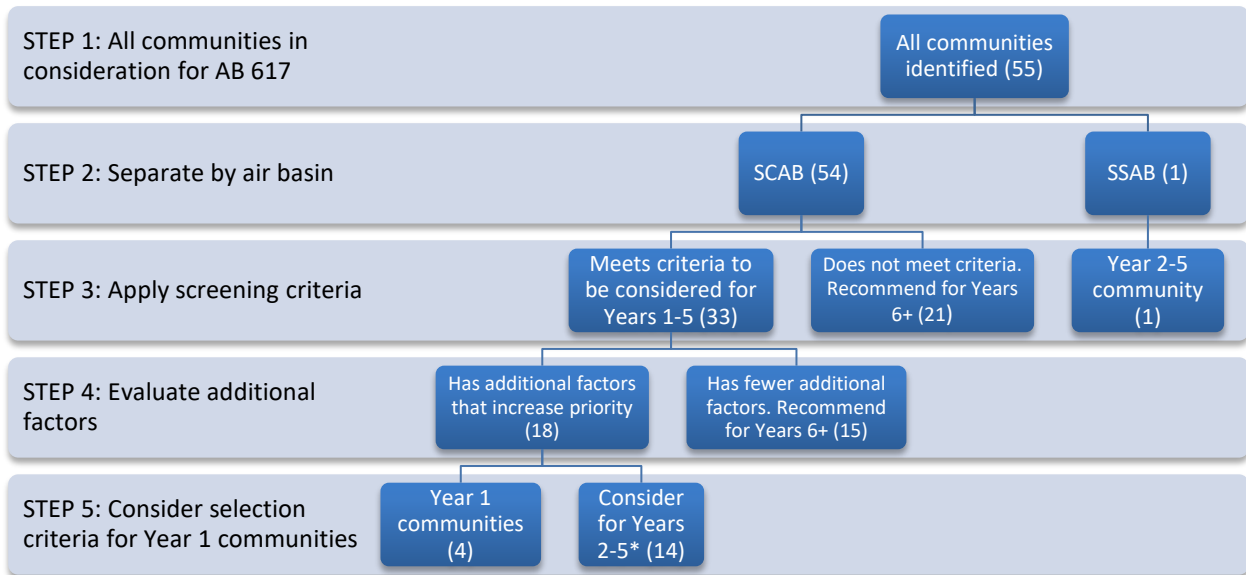
Summary of Community Input

Key areas of air quality concerns included both mobile and stationary sources, diesel sources, and oil production and processing facilities. Community members cited concerns about schools located near air pollution sources, such as industrial areas and freeways, and concerns about concentrations of industries in some areas. There were also concerns about air pollution impacts on communities with low socioeconomic resources, areas with heavy public health burdens, and areas where there are many children and elderly persons.

Proposal

Methodology

Based on the input received, staff used a systematic approach to identify and prioritize these communities and recommend the implementation schedule (Figure 1).



*Could be Years 2-6, depending on resources

Figure 1. Flow chart to illustrate prioritization methodology. The numbers in parentheses represent the number of communities in each category.

The data sources and criteria are described in detail in Attachment 1. In summary, staff used the Multiple Air Toxics Exposure Study (MATES) IV, CalEnviroScen 3.0, data on schools located near industrial areas or freeways, and community self-recommendations to identify 55 communities to be considered for the AB 617 program. Next, communities in the Salton Sea Air Basin (SSAB, one community) were

considered independently from communities in the South Coast Air Basin (SCAB, 54 communities), due to the unique air pollution issues in the SSAB (e.g. the Salton Sea, agricultural pollution, and PM10 in windblown dust). Among the 54 SCAB communities, staff applied screening criteria based on CalEnviroScreen 3.0 and MATES IV data to identify high priority communities that have high levels of air toxics and other environmental pollution, as well as public health burdens and socioeconomic disadvantages. Staff considered the following additional factors for further prioritization: community self-nomination, findings from past or current air monitoring studies, past or current community plans, and the proximity of schools near industrial areas and freeways.

Because of the tight deadlines established in statute, air districts have to follow a compressed schedule for AB 617 implementation in Year 1 communities. Therefore, to identify the communities to recommend for Year 1 implementation, staff evaluated the types of resources that are already available in the communities that would contribute to the success and rapid implementation of air monitoring and/or community emission reduction plans in Year 1. These include areas where SCAQMD already has some monitoring resources, and where additional resources available through AB 617 would expedite air quality improvements in those communities. Other considerations include having broad-based community support and geographic diversity with special consideration for communities that could serve as models for future AB 617 communities in California. Such criteria are consistent with statewide guidance provided by CARB.

Recommendations

The following communities are recommended for Year 1 implementation:

Community	County	Rationale
Wilmington, West Long Beach, Carson	LA	Build upon MATES V monitoring and outreach efforts
East Los Angeles, Boyle Heights	LA	Build upon Clean Communities Plan partnerships to address additional issues
San Bernardino, Muscody	SB	Build upon Clean Communities Plan partnerships to address additional issues
South Gate, Huntington Park, Florence-Firestone, Walnut Park*	LA	Industrial area proximity and MATES V monitoring

*As funding resources allow

Wilmington, West Long Beach, Carson: This port area community has among the highest diesel particulate matter levels in the SCAB, primarily due to the emissions from goods movement activities. In addition, this area includes several major petroleum refineries. This community also ranks near the top of the CalEnviroScreen 3.0 score, indicating that this community is highly impacted by environmental pollution, public health burdens, and social and economic factors. Staff has already begun implementing MATES V monitoring and community engagement efforts, and planning monitoring

and outreach efforts to implement Rule 1180 – Refinery Fenceline and Community Air Monitoring. AB 617 efforts in this community would build upon these monitoring and community engagement efforts. This community would serve as a statewide model for emission reductions in port areas with refineries and other air pollution sources.

East Los Angeles, Boyle Heights: This community, located east of downtown Los Angeles, has homes and schools near a major freeway interchange and industrial areas, and is located near a goods movement hub, including several rail yards. Boyle Heights was one of the pilot communities for the Clean Communities Plan, which serves as a strong foundation for engaging community leaders and understanding air quality priorities in this community. This community has very high scores for both MATES IV and CalEnviroScreen 3.0, indicating that this area has a high air toxics burden, as well as impacts from other environmental pollution, public health burdens, and social and economic disadvantages. Staff has previously conducted air toxics monitoring at Resurrection School in Boyle Heights, which identified potential impacts from diesel and other traffic emissions. While the Clean Communities Plan addressed several of the highest priority community issues in Boyle Heights, there are additional air quality issues that remain in Boyle Heights as well as in East Los Angeles, which would be addressed through AB 617 efforts in this community.

San Bernardino, Muscoy: This Inland Empire community is an area with significant public health burdens, and social and economic disadvantages. This community includes a major rail yard and warehouses. Staff previously conducted some air monitoring through the MATES program, which identified high levels of diesel particulate matter near the rail yard. The community near the rail yard was one of the pilot communities for the Clean Communities Plan, which included significant community engagement efforts, and exposure reduction efforts (e.g. filtration projects, low-VOC paints). SCAQMD also funded the Environmental Railyard Research Impacting Community Health (ENRRICH) study, which was a community health assessment and public health outreach project led by the late Dr. Sam Soret of Loma Linda University. These efforts provide unique information that will help to inform AB 617 efforts to further improve air quality in this disadvantaged area. This community would serve as a statewide model for what can be done near rail yards, which may include exposure reduction in addition to emission reductions.

South Gate, Huntington Park, Florence-Firestone, Walnut Park: This South East Los Angeles community includes part of the Alameda Corridor, an industrial area with a cargo rail line that links the ports area to the rail lines near downtown Los Angeles. There are residential neighborhoods and schools on both sides of the Alameda Corridor, and this community's school proximity score is in the highest (most impacted) category. This community has very high scores for both MATES IV and CalEnviroScreen 3.0, indicating that this area has a high air toxics burden, as well as impacts from other environmental pollution, public health burdens, and social and economic disadvantages. In 2017 and 2018, SCAQMD staff collaborated with the Los Angeles County

Department of Public Health in their Community Risk Reduction Initiative in the Florence-Firestone area. As part of this effort, staff participated in joint inspection efforts and other collaborative efforts with the County.

In addition, SCAQMD has already done substantial work in air toxics monitoring and emissions reduction efforts in Compton and Paramount/North Long Beach. Staff is recommending using some AB 617 resources to conduct investigations into new sources of hexavalent chromium emissions that impact these communities, and will work with CARB for this approach. These studies will be critical in developing future community emission reduction plans in Years 2-5 or 2-6, as investigations progress.

Benefits to SCAQMD

Implementation of AB 617 will help advance our mission to clean the air at a community scale, especially in the most impacted and disadvantaged communities within SCAQMD's jurisdiction. These efforts in the first year will serve as statewide models for the development of community air monitoring and emission reduction plans, and reinforce SCAQMD's leadership role in tackling complex local air quality issues.

Resource Impacts

The anticipated resource needs for SCAQMD's ongoing implementation of AB 617 is \$25 million per year, which assumes that two to four new communities are added each year, and each community program lasts approximately five years, with a maximum of 14 communities in the program simultaneously. Currently, staff is working with the California state legislature to set aside \$50 million for FY19-20 and FY20-21 for air monitoring and community emission reduction plan development efforts statewide.

Implementation costs for future years are dependent on the number of communities that are selected and the amount of funding allocated by the legislature to support AB 617 implementation by the local air districts. Staff will seek Board approval before appropriating future funding for AB 617 and if impacts to SCAQMD's budget are identified.

The Draft Report to CARB currently includes the community profiles for the top four recommended communities (Year 1). The final submittal to CARB will include additional profiles of communities that will be considered in subsequent years.

Attachments

1. Draft Report to CARB (Final Submittal from South Coast AQMD: Community Recommendations for AB 617 Implementation)
2. Board Meeting Presentation



Attachment 1

**Draft Report to CARB and
Appendices**

Final Submittal from South Coast AQMD: Community Recommendations for AB 617 Implementation

Introduction

Background

The South Coast Air Quality Management District (SCAQMD) is well-recognized as a leader in air pollution science, technology development, and innovative air quality regulation and incentive programs. One of SCAQMD's main priorities has been to improve air quality in communities with disproportionate air pollution and socioeconomic burdens. To address this, SCAQMD began its Environmental Justice (EJ) Initiatives in 1997, which included a call to conduct enhanced monitoring and analysis and a more systematic approach to reducing air toxic emissions, which culminated in March of the year 2000 with the Air Toxics Control Plan: the first local district air toxic control plan in the nation.

In 2010, SCAQMD launched the "Clean Communities Plan" (CCP), which placed greater emphasis on the cumulative effects of air toxics in disadvantaged communities. The CCP efforts allowed SCAQMD to develop strong relationships with community leaders, learn about local air quality issues from community members, and develop solutions jointly with community steering committees. Currently, SCAQMD is engaged in many efforts focusing on environmental justice communities, including the Multiple Air Toxics Exposure Study (MATES), the Community Air Toxics Initiative (CATI), the Environmental Justice Community Partnership (EJCP), the Environmental Justice Advisory Group (EJAG), the Young Leaders Advisory Council (YLAC) and many others.

Assembly Bill (AB) 617, signed into law in 2017, provides an opportunity to expand the work that SCAQMD has done in highly impacted communities. This bill further addresses air pollution issues in environmental justice communities through community-focused actions. The law requires the California Air Resources Board (CARB), in consultation with air districts, to select communities for community air monitoring and/or the preparation of community emission reduction programs. AB 617 specifies that the highest priority areas shall be disadvantaged communities with a high cumulative exposure burden for criteria pollutants and toxic air contaminants.

SCAQMD Reports to CARB on AB 617 Community Selections

As part of the legislative requirement, SCAQMD staff submitted to CARB on April 27, 2018 an initial report with a broad and inclusive list of all the communities being considered for the program, a description of the public outreach that was conducted, and the methodology used to identify a preliminary list of communities under consideration for AB 617 implementation.

A supplemental report was submitted on June 1, 2018 to provide an update to the initial document. This report included a compilation of SCAQMD's recommended communities, all self-recommendations received, and an updated preliminary community list that incorporated all self-recommended communities. A list of community organizations that have previously worked with SCAQMD staff and copies of all the self-recommendation forms and letters received were also attached to that report.

This final submittal provides a comprehensive description of SCAQMD's public process and technical methodology to identify and assess communities for AB 617, and recommendation for an initial implementation schedule. In recommending communities for the first year of implementation, SCAQMD staff placed special emphasis on communities where this program can be implemented rapidly and successfully in order to meet the tight timelines required by law, and where existing partnerships, local resources, and community engagement can assist with developing statewide models for future community plans.

Guiding Principles

The following principles served to guide our strategy to identify the most heavily burdened communities for AB 617 implementation:

1. Prioritize disadvantaged communities that are disproportionately affected by air pollution. Disadvantaged communities are defined in the California Health and Safety Code Section 39711: "based on geographic, socioeconomic, public health, and environmental hazard criteria".
2. Utilize appropriate existing data and tools, especially those that have gone through the public process.
3. Thoughtfully consider and integrate public input.
4. Prioritize communities with known local sources of air pollution where Community Plans would have significant and additional positive impacts.
5. Work toward promoting health equity by prioritizing the most heavily burdened and disadvantaged communities.

These guiding principles are reflected in the public process, the technical work, and the recommendations described in this report.

Summary of Outreach and Public Input

Outreach

Public input was a key element in identifying the most heavily burdened communities within SCAQMD's jurisdiction, and in determining the factors to use in prioritizing communities. Staff held 10 AB 617 community meetings between February and June 2018 (**Table 1**).

Table 1. Community Meetings Hosted by SCAQMD to Gather Public Input for AB 617

Date and Time	Location	Approximate Attendance
February 22, 2018 6:00 pm – 8:00 pm	City of Commerce Council Chambers 2535 Commerce Way, Commerce, CA 90040	100
March 13, 2018 6:00 pm – 8:00 pm	Wilmington Senior Center 1371 Eubank Ave., Wilmington, CA 90744	107
March 27, 2018 6:00 pm – 8:00 pm	Riverside County Administration Center 4080 Lemon St., Riverside, CA 92501	21
April 10, 2018 6:00 pm – 8:00 pm	San Manuel Gateway College – Loma Linda University 250 S. G Street, San Bernardino, CA 92410	30
April 17, 2018 6:00 pm – 8:00 pm	Brookhurst Community Center 2271 W. Crescent Ave., Anaheim, CA 92801	17
May 30, 2018 6:00 pm – 8:00 pm	Madison Elementary School 1124 Hobart St., Santa Ana, CA	43
June 6, 2018 6:00 pm – 8:00 pm	Jurupa Valley Unified School District 4850 Pedley Rd., Jurupa Valley, CA 92509	7
June 13, 2018 6:00 pm – 8:00 pm	South Gate Park 4900 Southern Ave., South Gate, CA 90280	35
June 19, 2018 6:00 pm – 8:00 pm	Lawrence Hutton Community Center 660 Colton Ave., Colton, CA 92324	20
June 21, 2018 6:00 pm – 8:00 pm	Las Palmas Park 505 S. Huntington St., San Fernando, CA 91340	36
	Total	416

For each meeting, information was distributed to more than 3,000 subscribers via SCAQMD’s email distribution lists and AB 617 meetings were also promoted through the following efforts:

- Met with the staff of elected officials at the city, county, state, and federal level;
- Delivered flyers at schools throughout the South Coast Air Basin (SCAB) to be shared with students’ parents;
- Visited government agencies to invite staff to upcoming meetings;
- Attended meetings for chambers of commerce and councils of governments; and
- Engaged environmental justice organizations, health advocates, senior centers, neighborhood councils, public libraries, and city halls in supporting outreach efforts.

During the community meetings, staff presented a summary of the available technical information that could help inform the community identification and prioritization process. Meeting participants engaged in small group discussions that fostered feedback for SCAQMD staff to then use in prioritizing communities for AB 617 implementation. Staff also conducted a Technical Workshop (June 8, 2018, 2:00PM –

4:00PM, at SCAQMD Headquarters in Diamond Bar), where the more technical elements of the prioritization process were discussed.

In addition, the team presented information about AB 617 at the SCAQMD EJCP meetings in Coachella and Irvine, government agency meetings that included workshops, advisory groups and staff briefings (25 meetings), and community meetings hosted by elected officials or community organizations (9 meetings).

Staff developed specialized outreach materials to provide information to the general public about AB 617. These outreach materials included several infographics, FAQs, social media graphics, meeting flyers, community self-recommendation forms, and a dedicated webpage with interactive maps to explore the technical data available for the SCAQMD jurisdiction (See Appendix B). All printed materials and most electronic materials were provided in English and Spanish.

Summary of Community Input

Community input was received during community meetings, and through community self-recommendations submitted via the SCAQMD website (www.aqmd.gov/ab617), via letters to SCAQMD staff or CARB staff, and through recommendations from the public at CARB public meetings.

Each community meeting served as an opportunity for stakeholders to ask questions about AB 617, and to express their concerns about air pollution in their neighborhoods. Key areas of air quality concerns included:

- Air Pollution Sources: Both mobile and stationary sources, diesel sources, and oil production and processing facilities.
- Proximity/Land Use Factors: Schools located near air pollution sources, such as industrial areas and freeways, concentrations of industries in certain neighborhoods, and air pollution exposure issues due to the siting of incompatible land uses.
- Population Factors: Communities with low socioeconomic resources, areas with public health burdens, and areas where children and seniors are highly impacted.

Several of these key factors are reflected in the MATES IV cancer risk or in the CalEnviroScreen 3.0 scoring metrics. These include emission sources (including diesel sources), other large facility emissions, concentrations of industries, toxic releases, hazardous waste sites, asthma rates, poverty, unemployment, educational attainment, and housing burden.

Meeting attendees gave feedback on the process and the factors SCAQMD staff used to prioritize initial recommendations. Participants largely advocated for the use of CalEnviroScreen 3.0 and MATES IV in identifying communities, as well as school and

daycare proximity to industrial facilities and freeways. Community members also requested increased:

- Collaboration among government agencies so efforts are not duplicated;
- Enforcement actions that hold businesses accountable;
- Monitoring in areas where the number of pollution sources and vulnerable populations are both high; and
- Attention to areas with high concentrations of smaller polluters (smaller businesses).

Attendees also recommended specific community groups, organizations, businesses, and government agencies with whom SCAQMD can collaborate as AB 617 efforts are further developed.

Data Sources and Methodology for Community Prioritization

Several technical data sources were used to inform the prioritization methodology. These include a suite of socioeconomic and environmental factors. This section describes the technical data sources and the prioritization methodology.

Data Sources

CalEnviroScreen 3.0

This tool developed by the California Office of Environmental Health Hazard Assessment (OEHHA) is a screening tool used by the State of California to identify communities that are most affected by various sources of pollution, and where people are especially vulnerable to pollution's effects. Areas in the top 25% state-wide for the overall CalEnviroScreen 3.0 score (shown in **Figure 1**, shaded in blue) were considered as part of the preliminary list of communities to be considered under AB 617.

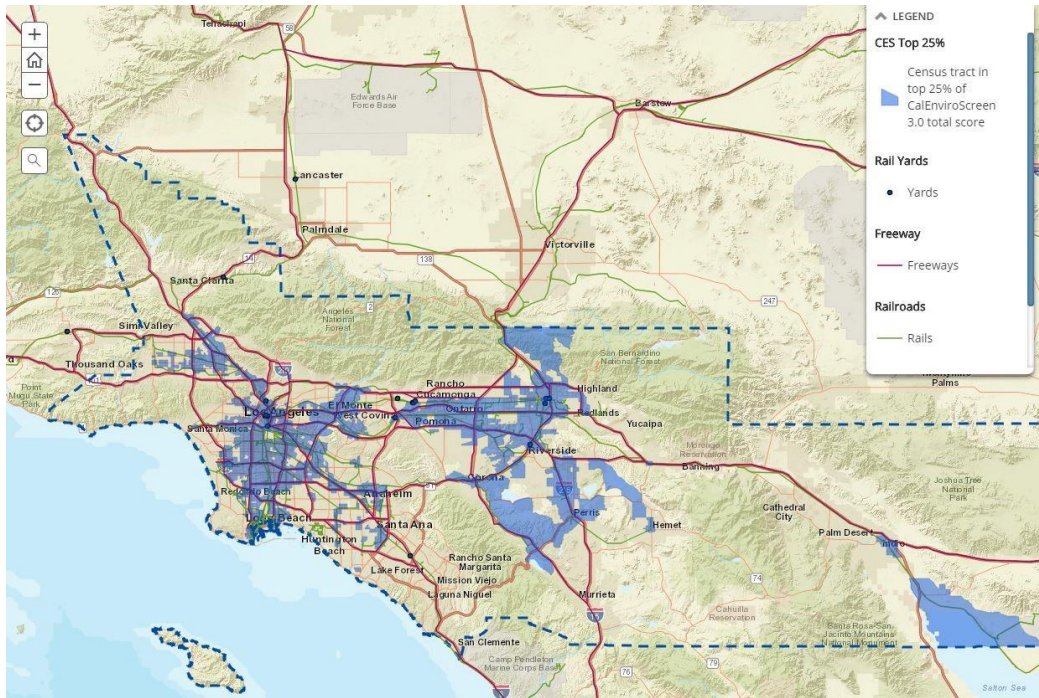


Figure 1: Census tracts in the top 25% state-wide in the CalEnviroScreen 3.0 overall score

More information on CalEnviroScreen 3.0 can be found on OEHHA’s website:
<https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30>.

MATES IV

The Multiple Air Toxics Exposure Study (MATES) is a study conducted by SCAQMD that evaluates the cumulative health impacts of air toxics within SCAQMD’s jurisdiction. The most recently completed study was MATES IV, which was conducted in 2012-2013, and used air toxics monitoring, emissions inventories, modeling, and health risk assessment techniques to calculate the cancer risk due to toxic air pollutants. Based on MATES IV data, approximately two-thirds of the air toxics cancer risk in the Basin is due to diesel particulate matter. Areas in the top 25% for overall cancer risk (shown in **Figure 2**, shaded in orange) were considered to be part of the preliminary list of communities to be considered under AB 617. More information regarding MATES IV and the final report can be found on SCAQMD’s website at: <http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-iv>.

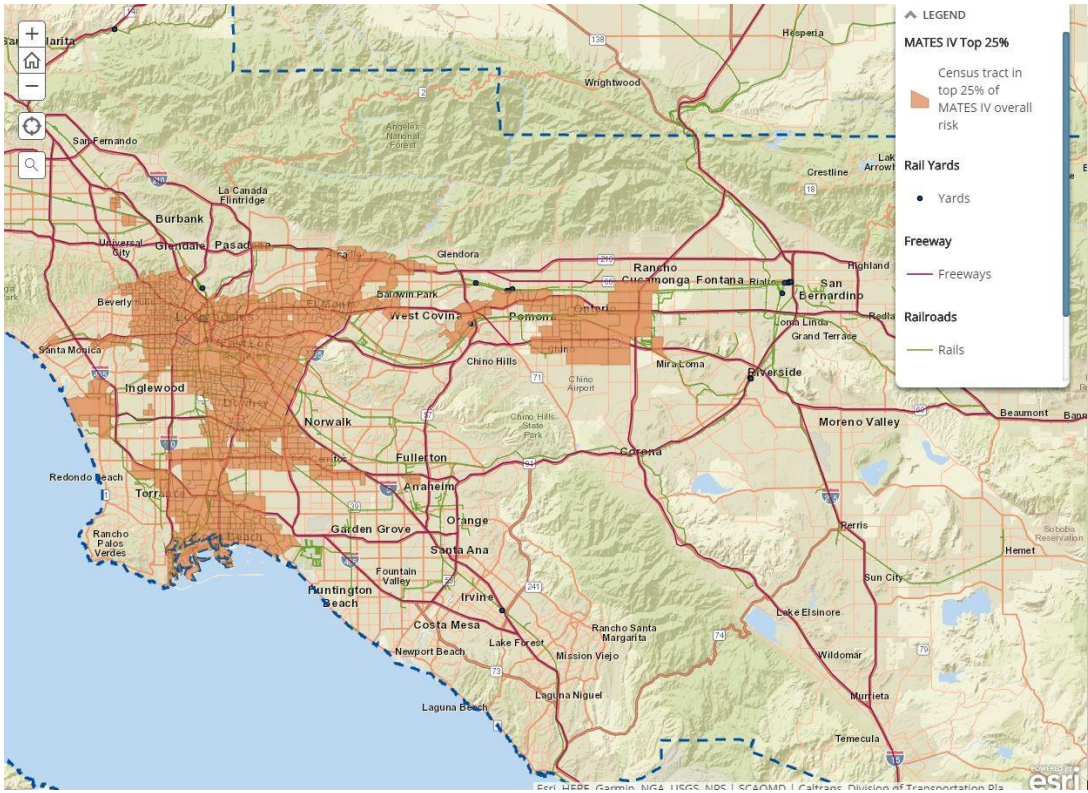


Figure 2: Census tracts in the top 25% in the MATES IV overall cancer risk

School and Daycare Proximity to Pollution Sources

The proximity of schools to sources of pollution such as industrial zones and freeways was a factor that was recommended by community members during the AB 617 community meetings. To address this concern, land use data for K-12 educational institutions and industrial land use was obtained from the Southern California Association of Governments (SCAG). The latest land use data available at this time is for the year 2012, which was also used in the SCAQMD 2016 Air Quality Management Plan (AQMP). Land use information for major freeways was obtained from California’s Department of Transportation, which is available on the internet at (<http://www.dot.ca.gov/hq/tsip/gis/datalibrary/Metadata/NHS.html>). Freeway information is provided in the form of a line shapefile that indicates the location of the centerline of the major thoroughfares.

Land use for K-12 education institutions, pre-schools, and day care centers include the following land use subcategories:

- 1260 Educational Institutions
- 1261 Pre-Schools/Day Care Centers
- 1262 Elementary Schools
- 1263 Junior or Intermediate High Schools
- 1264 Senior High Schools

Categories for 'Colleges and Universities' and 'Trade Schools and Professional Training Facilities' were not included in the school proximity factor.

Industrial land use includes the following subcategories:

- 1300 Industrial
 - 1310 Light Industrial
 - 1311 Manufacturing, Assembly, and Industrial Services
 - 1312 Picture and Television Production Lots
 - 1313 Packing Houses and Grain Elevators
 - 1314 Research and Development
 - 1320 Heavy Industrial
 - 1321 Manufacturing
 - 1322 Petroleum Refining and Processing
 - 1323 Open Storage
 - 1324 Major Metal Processing
 - 1325 Chemical Processing
 - 1330 Extraction
 - 1331 Mineral Extraction - Other Than Oil and Gas
 - 1332 Mineral Extraction - Oil and Gas
 - 1340 Wholesaling and Warehousing

Agricultural land use and its subcategories were not included in the industrial land use metric:

- 2000 Agriculture
 - 2100 Cropland and Improved Pasture Land
 - 2110 Irrigated Cropland and Improved Pasture Land
 - 2120 Non-Irrigated Cropland and Improved Pasture Land
 - 2200 Orchards and Vineyards
 - 2300 Nurseries
 - 2400 Dairy, Intensive Livestock, and Associated Facilities
 - 2500 Poultry Operations
 - 2600 Other Agriculture
 - 2700 Horse Ranches

Figure 3 illustrates an example of the analysis of school proximity to industrial sources and freeways. The school proximity factor is calculated by establishing a 1000-foot buffer zone around school parcels. Using GIS tools, the intersection of the schools' 1000-foot buffer zone with industrial land use parcels and with freeway line tracts was calculated.

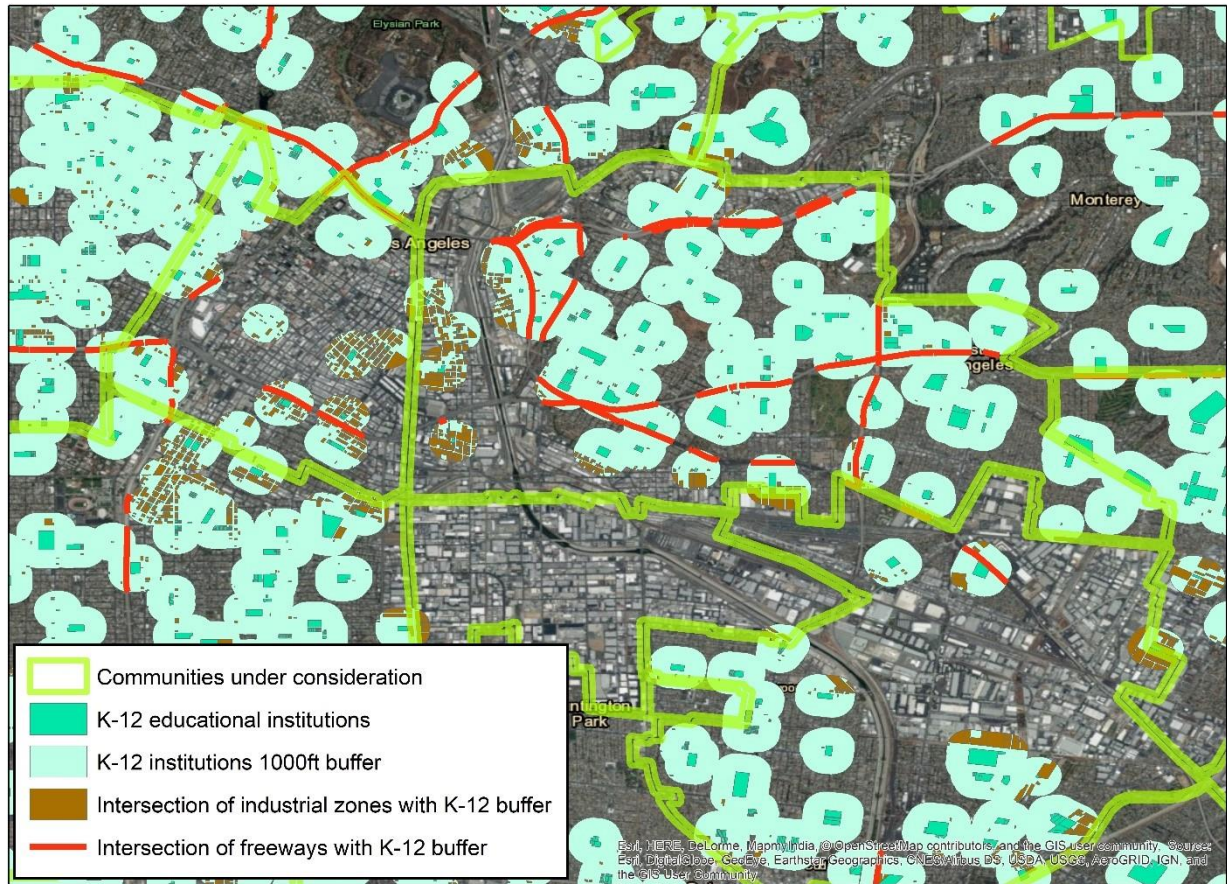


Figure 3: Sample of land use information used in the calculation of school proximity to freeways and industrial zones

The overall methodology used to calculate the factor that accounts for the proximity of schools to industry and freeways is as follows:

1. Define 1000-foot buffer zone around the school parcels
2. Eliminate overlapping buffer areas from nearby parcels by combining buffer zones, where appropriate.
3. Determine school proximity to industrial zones:
 - a. Identify industrial parcels that intersect with school buffer areas.
 - b. Calculate total area of intersecting industrial zones with school buffer zones within a census tract.
 - c. Divide the total area of intersecting industrial zones by the area of the census tract.
 - d. Normalize the value of each census tract by the maximum value obtained in the SCAQMD jurisdiction
 - e. Multiply the normalized value by the census tract population ($F_{industry}$).
4. Determine school proximity to freeways:
 - a. Identify freeway line tracts that intersect with school buffer zones.

- b. Calculate total length of intersecting freeways with school buffer zones within a census tract.
 - c. Divide the total length of intersecting freeways by the area of the census tract.
 - d. Normalize the value of each census tract by the maximum value obtained in the SCAQMD jurisdiction
 - e. Multiply the normalized value by the census tract population (F_{freeways}).
5. Calculate the school proximity factor (F_{schools}) by adding the two factors ($F_{\text{industry}} + F_{\text{freeways}}$) for each census tract.
6. Determine the average and the maximum school proximity factor by:
 - a. Average: aggregating the F_{schools} for all census tracts in a given community and dividing the total sum by the total area of the community
 - b. Maximum: dividing the F_{schools} by the area of the census tract and selecting the maximum value in each community

Regulatory and Special Monitoring Studies

Information from current and past monitoring efforts is useful to inform the prioritization process. SCAQMD operates a network of more than 30 monitoring stations within the SCAQMD jurisdiction that measure criteria pollutants. In addition, over the years, staff have conducted many special monitoring studies that included both stationary and mobile monitoring units, most of which addressed concerns around toxic air pollutants. The location of regulatory monitors as well as a selection of special monitoring locations is shown in **Figure 4**. This map is not intended to be a comprehensive representation of the special monitoring studies conducted by SCAQMD.

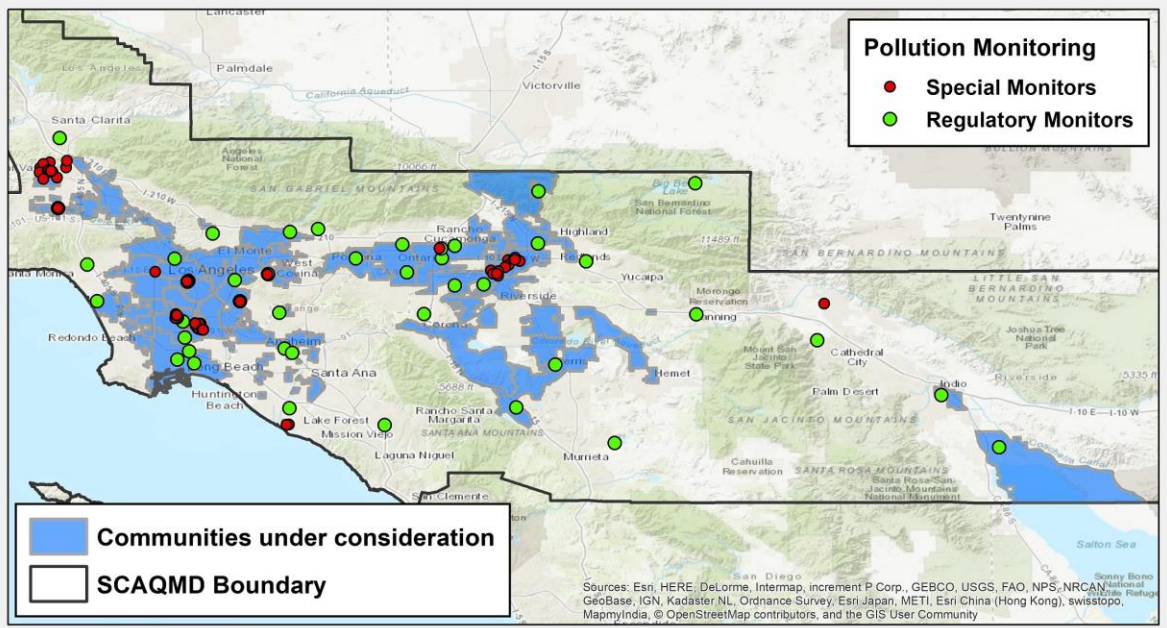
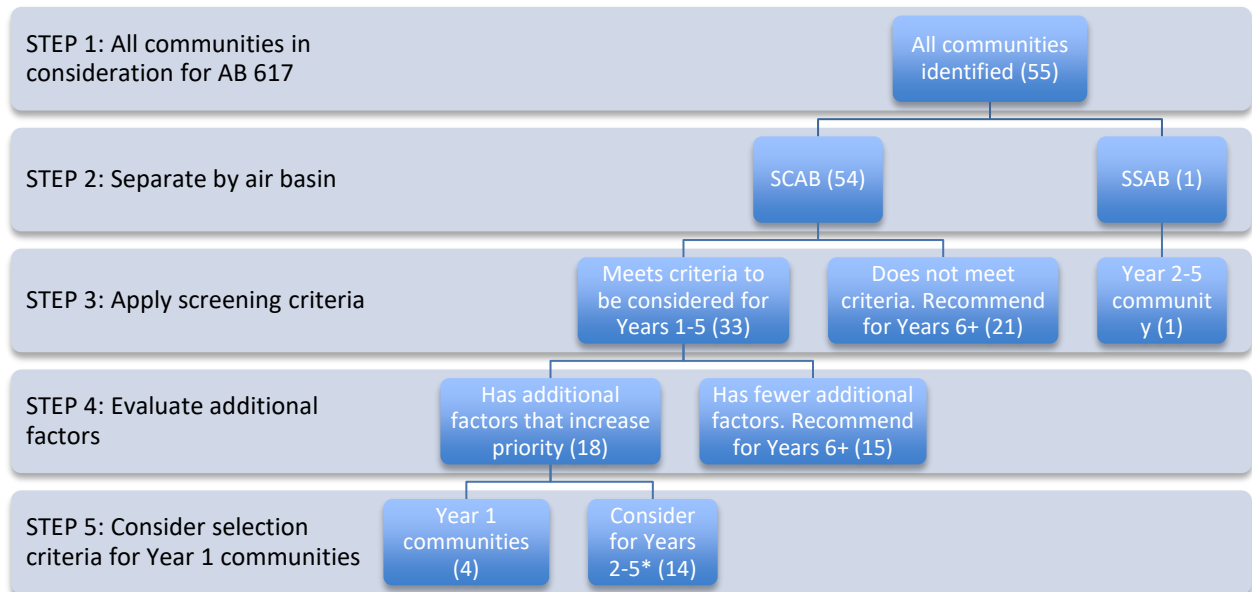


Figure 4: Location of recent or current regulatory and special monitoring stations within SCAQMD’s jurisdiction

Methodology for Community Identification and Prioritization

Staff applied a systematic approach to identify and prioritize communities for AB 617 and to recommend an initial implementation schedule (**Figure 5**).



*Could be Years 2-6, depending on resources

Figure 5. Flow chart to illustrate prioritization methodology

STEP 1: To identify communities for consideration for AB 617, staff utilized a broadly inclusive approach, beginning by including census tracts that met one or more of the following three criteria:

- a) CalEnviroScreen 3.0 score in the top 25% statewide
- b) MATES IV air toxics cancer risk in the top 25% in the SCAB
- c) Average percentage of industrial land use and freeways within 1,000 feet from school/daycare boundaries was in the top 20%

In addition, communities were included in the preliminary list if SCAQMD staff received a community self-recommendation prior to May 17, 2018. This list includes communities for which self-recommendation forms were submitted that were recommended during an SCAQMD community meeting, or that were recommended to CARB staff, who forwarded the recommendations to SCAQMD staff. Census tracts were grouped into communities by geographic clustering, often following city or typically understood neighborhood boundaries, as well as communities with common known pollution sources. The list of all communities considered included 55 communities within SCAQMD's jurisdiction (**Figure 6**). These community boundaries should be considered preliminary, and the specific boundaries may change as AB 617 implementation progresses. However, these were the boundaries that SCAQMD staff used in order to complete the technical analysis for community prioritization.

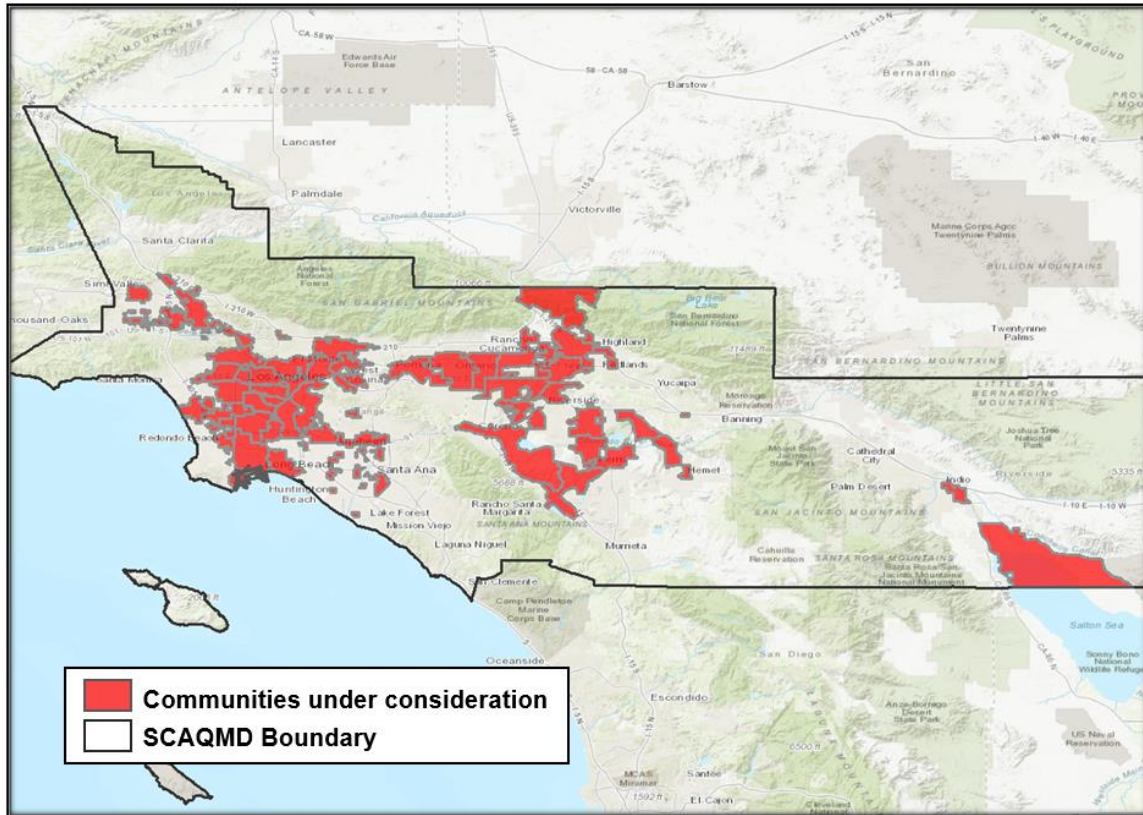


Figure 6: Map showing the preliminary boundaries of the communities under consideration

STEP 2: It is widely recognized that the Coachella Valley has many unique air pollution issues (e.g. the Salton Sea, agricultural pollution, and PM10 in windblown dust) that are very different from those for the SCAB. Therefore, communities in the Salton Sea Air Basin (SSAB, one community) were considered independently from communities in the SCAB (54 communities).

STEP 3: To prioritize the 54 communities in the SCAB, staff identified the census tract within each community with the highest percentile score for CalEnviroScreen 3.0 and MATES IV, and applied both of the following screening criteria:

- a) CalEnviroScreen 3.0 score in the top 5% statewide; AND
- b) MATES IV air toxics cancer risk in the top 50% in the SCAQMD jurisdiction

This step provides a focus on the most heavily burdened communities. Since CalEnviroScreen includes several non-air quality factors, the MATES metric was added to ensure that there is a significant air toxic burden addressed by air-related measures under AB 617. A total of 33 communities met both these screening criteria.

For SSAB: One community (Eastern Coachella Valley) was identified for AB 617 consideration. There are several existing efforts to deploy low-cost PM sensors in this

community, as well as a hydrogen sulfide reporting system that was implemented in 2018. Because these efforts are relatively new, staff recommends allowing these efforts to collect some longer-term air pollution data first, which will inform the development of emissions or exposure reduction plans. Therefore, this community is recommended for implementation in Years 2-5.

STEP 4: To further prioritize among the 33 high priority communities in the SCAB, the following additional factors were considered:

- a) Self-nomination received;
- b) Past or current air monitoring study findings;
- c) Past or current community plans; and
- d) School proximity metric in the highest category.

Among the 33 communities in the SCAB that met the Step 3 screening criteria, there were 10 communities that had two or more of these factors and eight additional communities that had a self-nomination received on or prior to May 17, 2018, or during the June 15, 2018 SCAQMD Stationary Source Committee meeting. These 18 communities are recommended to be considered for Years 1-5 or 1-6, depending on available resources. The remaining 15 communities that had zero or only one factor, but were not self-nominated, are recommended for implementation in Years 6+.

STEP 5: Because of the tight deadlines established in statute, air districts have to follow a compressed schedule for implementing plans in Year 1 communities. Therefore, in recommending the implementation schedule, staff evaluated the types of resources that are already available in the communities that would contribute to the rapid and successful implementation of air monitoring and/or community emissions reduction plans in Year 1. These include areas where SCAQMD already has placed some monitoring resources, where previous emission reduction efforts have occurred, and where additional resources available through AB 617 would expedite air quality improvements in those communities. Other considerations include having broad-based community support and geographic diversity, with special consideration for communities that could serve as models for future AB 617 communities in California. Such criteria are consistent with the statewide guidance provided by CARB.

Results after Applying Community Prioritization Methodology

The CalEnviroScreen 3.0 and MATES IV scores (in percentile) in the census tracts included in the communities under consideration for AB 617 implementation are shown in **Figure 7** and **Figure 8**. In the SCAQMD's jurisdiction, communities with high CalEnviroScreen 3.0 scores included areas of central and south Los Angeles County, parts of the San Fernando and San Gabriel Valleys, some parts of northern and central Orange County, parts of San Bernardino and Riverside Counties between the I-60 and I-210 freeways, and communities in Moreno Valley and Perris Valley. Communities

with high CalEnviroScreen 3.0 scores in Los Angeles County tended to have higher diesel particulate matter levels, while those in the Inland Empire counties had higher levels of PM2.5 and ozone. MATES IV percentile scores are strongly driven by diesel particulate matter levels, which are higher in the communities near the ports, in central Los Angeles, and along the goods movement corridors.

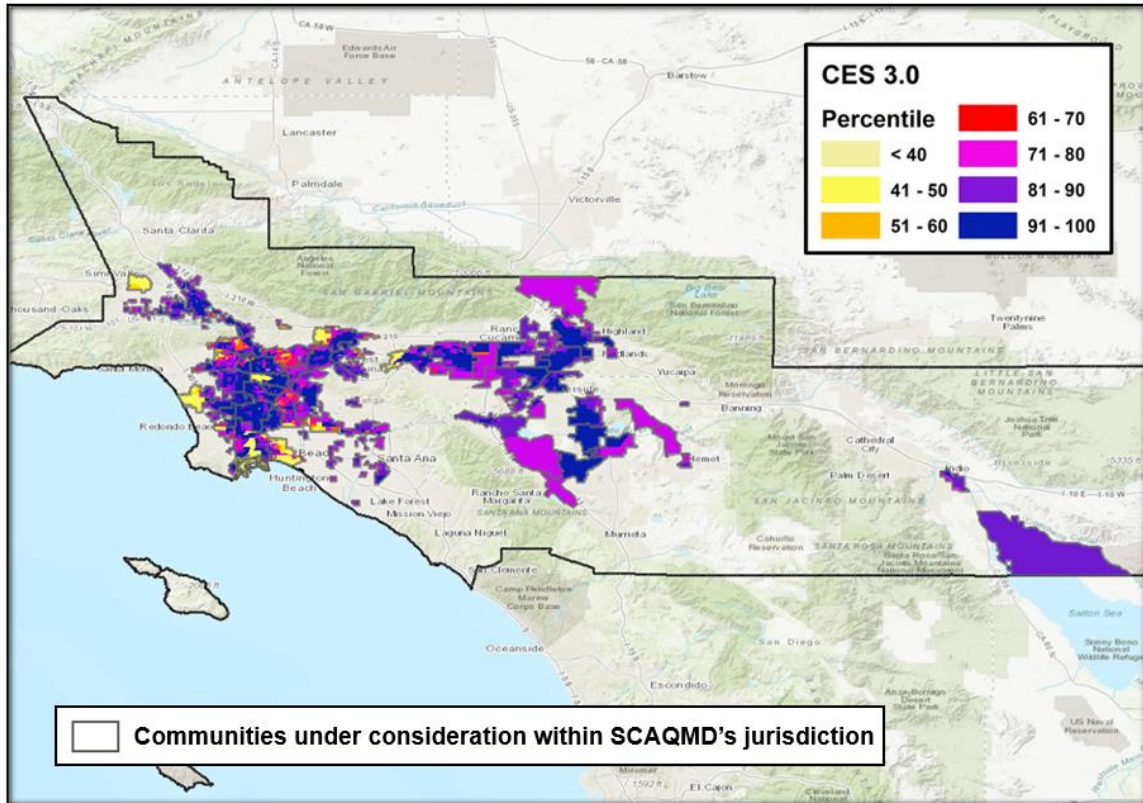


Figure 7: CalEnviroScreen 3.0 percentile scores for the census tracts within the communities under consideration

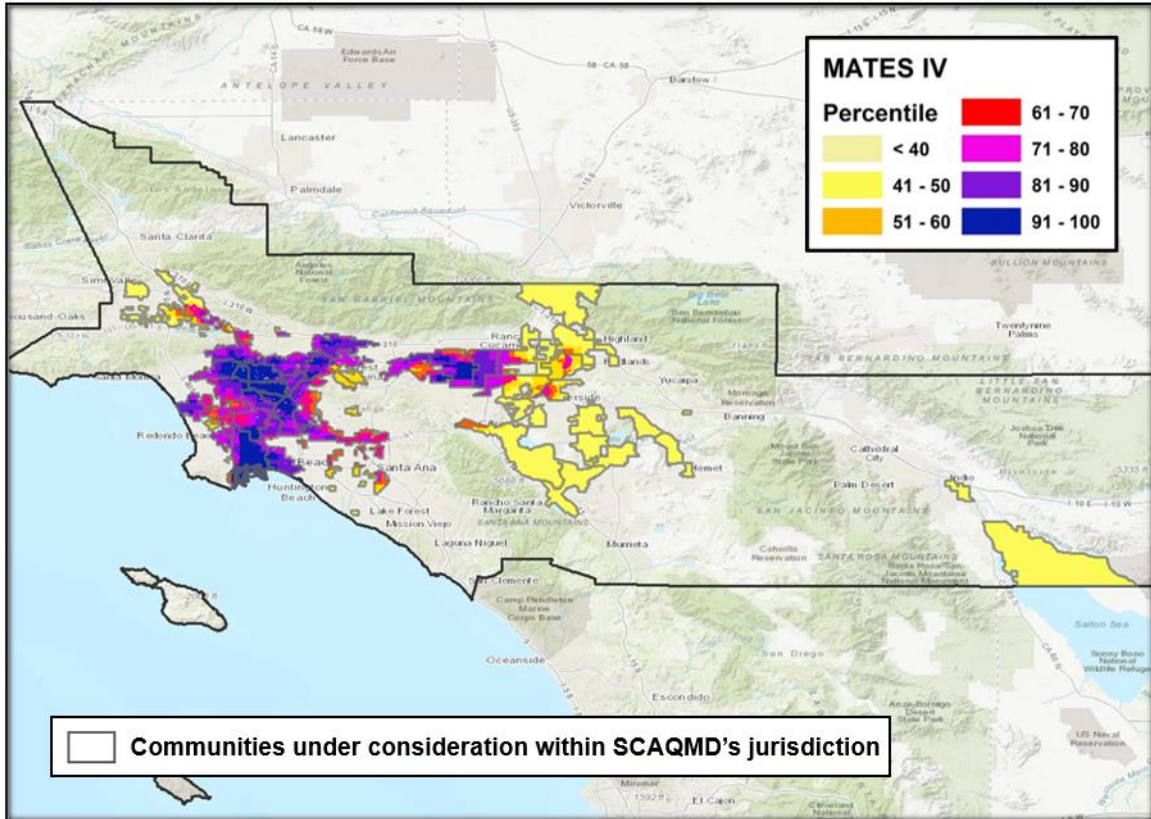


Figure 8: MATES IV percentile scores in the census tracts within communities under consideration

The overall school proximity factor by census tract, F_{schools} , expressed in percentile is presented in **Figure 9**.

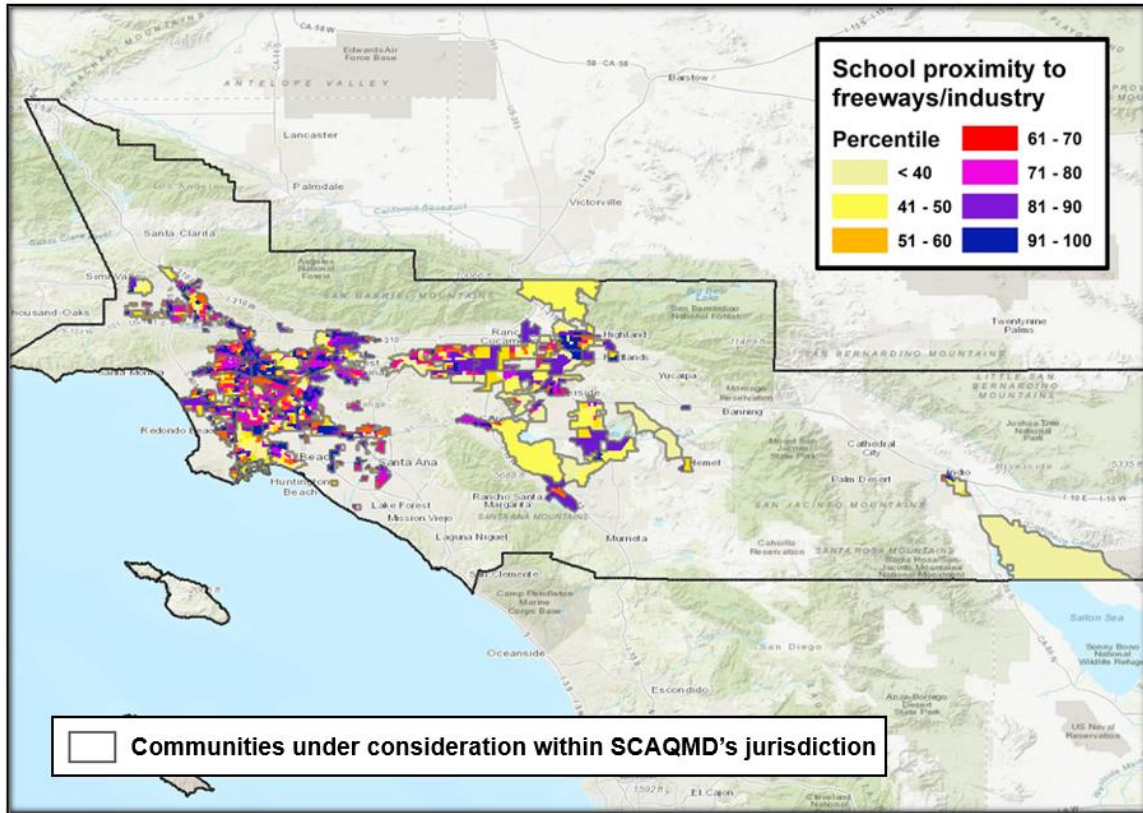


Figure 9: School proximity to freeways and industry scores expressed in percentile in the census tracts within communities under consideration

Prioritization Table

For the prioritization, the maximum census tract scores for CalEnviroScreen 3.0, MATES IV, and the school proximity metric were used. A sensitivity analysis using the average of each metric within each community was also conducted. The average scores in a given community were calculated using a population-weighted average, by multiplying population by the CalEnviroScreen 3.0 and MATES IV score and dividing by the total population in the community. The population data for each census tract was obtained directly from CalEnviroScreen 3.0.

For the CalEnviroScreen 3.0 and MATES IV metrics, communities that had a high average score for a given metric typically also had high maximum scores for that same metric. However, for the school proximity metric, the scores varied sharply from one census tract to the next, such that communities with high average school proximity scores were not always the communities that had the highest maximum school proximity scores. However, seven out of the eight communities that had the maximum school proximity scores above 1,500 also had relatively high average school proximity scores across the community. **Table 2** provides the values for the prioritization factors for all 55 communities in consideration for AB 617 implementation. The communities are listed in alphabetical order.

Table 2. Prioritization factors for communities in consideration for AB 617 implementation

Community Name	Maximum CalEnviroScreen 3.0 Score (Percentile)	Maximum MATES IV (Percentile)	Maximum School Proximity Score	Self-Nominated? (Y/N)	MATES V Fixed Site	Special Monitoring Findings	Community Plans
Anaheim, Fullerton, Orange	95.5	80.0	2160.4	NO	Anaheim		
Azusa, Duarte, Monrovia, Arcadia, North 605	92.9	95.3	1084.8	NO			
Beaumont	82.5	17.0	61.8	NO			
Bell, Bell Gardens, Cudahy	99.2	97.8	1145.4	YES			
Bloomington, Fontana, Rialto	99.1	70.9	820.2	YES	Inland Valley SB (Fontana)		
Canoga Park, Northridge, Reseda, Van Nuys, Panorama City, Winnetka, Tarzana	98.9	59.8	1205.7	NO		Aviation Study	
Cerritos, Buena Park, Artesia, La Mirada, Hawaiian Gardens	93.8	87.2	1105.7	YES			
Colton, Grand Terrace, San Bernardino (Southwest)	99.4	70.5	171.7	YES			
Commerce, Maywood, Vernon	99.3	99.0	552.5	YES		Exide, MATES III	
Compton, Rancho Dominguez, Willowbrook, Lynwood	99.6	92.4	1260.0	YES	Compton	Community Air Toxics Initiative	Community Air Toxics Initiative
Corona, Temescal Valley	96.4	51.8	954.1	YES			
Costa Mesa	80.5	22.9	1191.0	NO			
Culver City (East), Palms (East)	84.8	78.0	1263.6	NO			
Downey, Bellflower, Lakewood (North), Cerritos (North)	91.9	96.1	837.4	NO			

Community Name	Maximum CalEnviroScreen 3.0 Score (Percentile)	Maximum MATES IV (Percentile)	Maximum School Proximity Score	Self-Nominated? (Y/N)	MATES V Fixed Site	Special Monitoring Findings	Community Plans
Downtown Los Angeles	99.7	99.9	1609.8	NO	Downtown LA (adjacent)		
East Los Angeles, Boyle Heights	99.9	99.4	1354	YES	Downtown LA		Clean Communities Plan
El Monte, South El Monte, Avocado Heights, Hacienda Heights, West La Puente, Bassett	98.7	99.3	3027.4	YES			
Gardena, Alondra Park, Lawndale	99.8	75.1	863.6	NO			
Glendale (Central and South), Burbank	99.4	80.0	1867.1	NO			
Hemet, San Jacinto	85.1	9.4	422.2	NO			
Highland, Crestline	95.7	30.2	1102.9	NO			
Hollywood, Los Feliz, Atwater, Echo Park, Silverlake	99.4	99.3	1663.0	NO	Downtown LA		
Huntington Beach	76.5	38.6	193.4	NO			
Indio, Eastern Coachella Valley	90.8	19.2	249.9	YES		Mecca odors, Salton Sea H2S, MATES III	
Inglewood, Hawthorne, Westmont, Vermont	99.6	75.1	1103.3	NO			
La Habra	91.1	43.6	714.5	NO			
La Puente, Covina, West Covina, Baldwin Park	97.9	85.2	1164.9	NO			

Community Name	Maximum CalEnviroScreen 3.0 Score (Percentile)	Maximum MATES IV (Percentile)	Maximum School Proximity Score	Self-Nominated? (Y/N)	MATES V Fixed Site	Special Monitoring Findings	Community Plans
Lake Elsinore	91.8	10.8	118.5	NO			
LAX, Lennox, El Segundo	98.2	98.0	1089.5	NO		MATES IV	
Long Beach (East)	96.9	98.3	701.9	NO	North Long Beach		
Mira Loma, Jurupa Valley, Eastvale, Pedley	97.7	78.0	212.5	YES	Rubidoux	MATES IV	
Montebello	94.8	85.1	748.4	NO			
Moreno Valley	99.2	27.0	406.2	YES			
Ontario (West), Montclair, Upland, Claremont (South)	100.0	94.5	1325.7	NO			
Pacoima, North Hollywood, Sun Valley, San Fernando, Sylmar	98.8	80.2	1655.6	YES	Pacoima	MATES III	
Paramount, Long Beach (North)	99.2	87.5	522.8	YES		Community Air Toxics Initiative, Carlton Forge, 710 study	Community Air Toxics Initiative / Paramount Investigation
Pasadena near I-210	80.4	78.2	863.1	NO			
Perris, Nuevo	94.7	15.6	707.2	NO			
Pomona, Chino, Walnut (East), San Dimas (South)	99.3	92.5	981.2	NO			
Porter Ranch	74.2	31.7	316.3	YES			
Rancho Cucamonga, Ontario (East)	97.3	95.0	569.4	YES			
Redlands, Loma Linda	89.8	26.5	229.3	NO			

Community Name	Maximum CalEnviroScreen 3.0 Score (Percentile)	Maximum MATES IV (Percentile)	Maximum School Proximity Score	Self-Nominated? (Y/N)	MATES V Fixed Site	Special Monitoring Findings	Community Plans
Riverside (Central and East), Rubidoux	99.7	69.1	786.4	YES			
Riverside (West)	98.9	44.0	915.9	NO			
San Bernardino, Muscoy	99.7	51.3	622.0	YES		MATES IV, MATES III	Clean Communities Plan, ENRRICH
San Gabriel, Rosemead, Monterey Park, Alhambra (South)	92.6	92.7	731.8	NO			
San Pedro, Harbor City (East)	97.3	97.9	819.8	NO			
Santa Ana	92.8	74.5	1368.8	YES		MATES III	
Santa Fe Springs, Norwalk, West Whittier, Los Nietos, Pico Rivera	96.5	87.7	1402.5	NO	Pico Rivera		
South Gate, Huntington Park, Florence-Firestone, Walnut Park	99.7	98.3	1755.3	YES	Huntington Park		
South Los Angeles, South East Los Angeles, Hyde Park	99.8	99.4	1928.0	YES			
Torrance	98.7	84.0	693.9	YES			
Westlake, Korea Town, Midcity, Mid-Wilshire	99.2	98.7	1365.8	NO			
Westminster, Stanton, Garden Grove	87.6	60.8	1368.8	NO			
Wilmington, Long Beach (West), Carson	98.8	100.0	644.1	YES	West Long Beach	Fluxsense, 710 study	

Recommendations

Recommended Implementation Schedule (Year 1, Years 2-5, Years 6+)

Table 3 includes the initial recommendations for the implementation schedule for all SCAQMD communities under consideration for AB 617 implementation. This implementation schedule is subject to change in subsequent years of the program as additional information becomes available that may change the prioritization.

Table 3. List of all SCAQMD communities under consideration for AB 617 implementation (grouped by recommended implementation timeframe, then in alphabetical order, by County)

<p>Communities Recommended for Year 1:</p> <p><u>LOS ANGELES COUNTY</u></p> <ul style="list-style-type: none">• East Los Angeles / Boyle Heights• South Gate / Huntington Park / Florence – Firestone / Walnut Park*• Wilmington / Long Beach (West) / Carson <p><u>SAN BERNARDINO COUNTY</u></p> <ul style="list-style-type: none">• San Bernardino / Muscoy
<p>Communities Initially Recommended for Years 2-5 or 2-6*:</p> <p><u>LOS ANGELES COUNTY</u></p> <ul style="list-style-type: none">• Bell / Bell Gardens / Cudahy• Commerce / Maywood / Vernon• Compton / Rancho Dominguez / Willowbrook / Lynwood• El Monte / South El Monte / Avocado Heights / Hacienda Heights / West La Puente / Bassett• Pacoima / North Hollywood / Sun Valley / San Fernando / Sylmar• Paramount / Long Beach (North)• South Los Angeles / South East Los Angeles / Hyde Park• Torrance <p><u>RIVERSIDE COUNTY</u></p> <ul style="list-style-type: none">• Corona / Temescal Valley• Indio / Eastern Coachella Valley• Mira Loma / Jurupa Valley / Eastvale / Pedley• Riverside (Central & East) / Rubidoux <p><u>SAN BERNARDINO COUNTY</u></p> <ul style="list-style-type: none">• Bloomington / Fontana / Rialto• Colton / Grand Terrace / San Bernardino (Southwest)• Rancho Cucamonga / Ontario (East)
<p>Communities Initially Recommended for Years 6+:</p> <p><u>LOS ANGELES COUNTY</u></p> <ul style="list-style-type: none">• Azusa / Duarte / Monrovia / Arcadia / North 605• Canoga Park / Northridge / Reseda / Van Nuys / Panorama City / Winnetka / Tarzana

- Culver City (East) / Palms (East)
- Downey / Bellflower / Lakewood (North) / Cerritos (North)
- Downtown Los Angeles
- Gardena / Alondra Park / Lawndale
- Glendale (Central & South) / Burbank
- Hollywood / Los Feliz / Atwater Village / Echo Park / Silver Lake
- Inglewood / Hawthorne / Westmont / Vermont
- La Puente / Covina / West Covina / Baldwin Park
- Long Beach (East)
- LAX / Lennox / El Segundo
- Montebello
- Pasadena near I-210
- Porter Ranch
- San Gabriel / Rosemead / Monterey Park / Alhambra (South)
- San Pedro / Harbor City (East)
- Santa Fe Springs / Norwalk / West Whittier / Los Nietos / Pico Rivera
- Westlake / Korea Town / Midcity / Mid-Wilshire

ORANGE COUNTY

- Anaheim / Fullerton / Orange
- Costa Mesa
- Huntington Beach
- La Habra
- Santa Ana
- Westminster / Garden Grove / Stanton

RIVERSIDE COUNTY

- Beaumont
- Hemet / San Jacinto
- Lake Elsinore
- Moreno Valley
- Perris / Nuevo
- Riverside (West)

SAN BERNARDINO COUNTY

- Highland / Crestline
- Redlands / Loma Linda

CROSS-COUNTY

- Cerritos / Buena Park / Artesia / La Mirada / Hawaiian Gardens
- Ontario (West) / Montclair / Upland / Claremont (South)
- Pomona / Chino / Walnut (East) / San Dimas (South)

*As funding resources allow

Communities Recommended for Year 1 Implementation

Below is the summary of the recommended communities for Year 1 implementation. SCAQMD is committed to working with the communities, through community steering committees, to identify the air quality concerns and needs from the community’s perspective. Air monitoring plans and/or emissions reduction plans will be developed after these discussions occur. SCAQMD staff does not recommend presupposing the need for air monitoring or emissions reduction plans in each community, nor the timing of such plans at this time, without receiving additional community input.

The following communities are recommended for initial Year 1 implementation:

Community	County	Rationale
Wilmington, West Long Beach, Carson	LA	Build upon MATES V monitoring and outreach efforts
East Los Angeles, Boyle Heights	LA	Build upon Clean Communities Plan partnerships to address additional issues
San Bernardino, Muscoy	SB	Build upon Clean Communities Plan partnerships to address additional issues
South Gate, Huntington Park, Florence-Firestone, Walnut Park*	LA	Industrial area proximity and MATES V monitoring

*As funding resources allow

Detailed information about each community is provided in the community profiles in Appendix A, including descriptions of the population, screening metrics, key air pollution sources, and past or current air monitoring and community plans. Below is a brief summary of the rationale for recommending these communities for Year 1 implementation of AB 617.

Wilmington, West Long Beach, Carson (Figure 10): This community adjacent to the ports has among the highest diesel particulate matter levels in the SCAB, primarily due to emissions from goods movement activities, including rail yards. In addition, this area includes several major petroleum refineries. This community also ranks near the top of the CalEnviroScreen 3.0 score, indicating that this community is highly impacted by environmental pollution, public health burdens, and socioeconomic factors. SCAQMD staff have already begun implementing MATES V monitoring and community engagement efforts, and are planning monitoring and outreach efforts to implement Rule 1180. The MATES V study includes a monitoring site in West Long Beach, a community air measurements and evaluation project in West Long Beach, a community sensor project in Carson and Wilmington, and refinery community and fence-line monitoring at each of the major refineries. The community engagement efforts that are being conducted for the MATES V program as well as future community engagement for implementation of Rule 1180 – Refinery Fence-line and Community Air Monitoring, will both inform and complement AB 617 efforts in this community. Previous and current outreach in this community have included Long Beach Alliance for Children with Asthma (LBACA), Long Beach Department of Health

and Human Services, Los Angeles Unified School District (LAUSD, which includes schools in Wilmington and Carson), Wilmington YMCA, East Yard Communities for Environmental Justice (EYCEJ), City of Carson, City of Los Angeles, Del Amo Action Committee, Wilmington Senior Center, Andeavor Los Angeles Refinery, Western States Petroleum Association (WSPA), and the offices of elected officials.

AB 617 efforts in this community would build upon the current monitoring and community engagement efforts. This community would serve as a statewide model for emission reductions in a port area with refineries and other air pollution sources. This community was recommended by the City of Los Angeles, the City of Carson, Communities for a Better Environment (CBE), as well as several individuals who submitted recommendations.

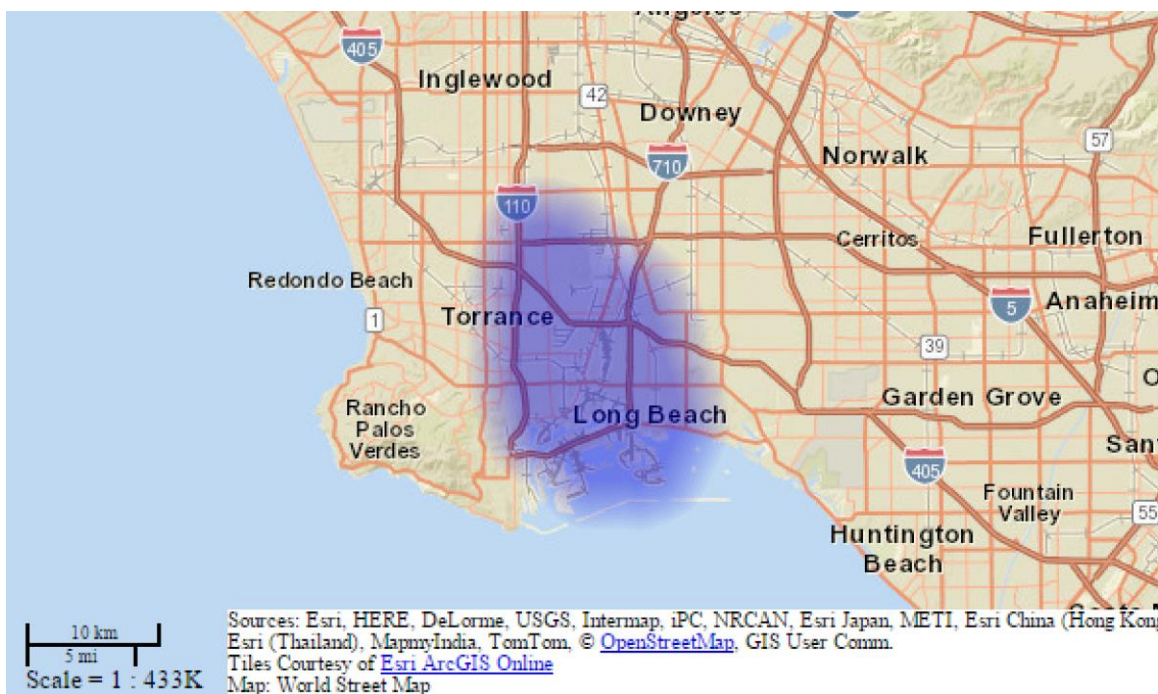


Figure 10: Map showing approximate geographic area of the Wilmington, Carson, West Long Beach community

East Los Angeles, Boyle Heights (Figure 11): This community, located northeast of downtown Los Angeles, has homes and schools near major freeway interchanges and industrial areas. Additionally, it is located near a goods movement hub, which includes several major rail yards. Boyle Heights was one of the pilot communities for the SCAQMD CCP, which serves as a strong foundation for engaging community leaders and understanding air quality priorities in this community. Through the CCP efforts and other related work, SCAQMD staff already has strong relationships with community leaders; including an overall understanding of the air quality concerns and priorities in the community and working with the community to develop and operationalize an air quality needs assessment. This community has very high percentile scores for both MATES IV and CalEnviroScreen 3.0, indicating that this

area has a high air toxics burden, as well as impacts from other environmental pollution, public health burdens, and socioeconomic factors. SCAQMD staff has previously conducted air toxics monitoring at Resurrection Catholic School in Boyle Heights, which identified potential impacts from diesel and other traffic emissions. Through the CCP and other projects, SCAQMD worked with several organizations that work in this community, including Resurrection Church, Legacy LA (Ramona Gardens), Centro Maravilla Service Center, Boyle Heights Neighborhood Council, Service Employees International Union (SEIU), Barrio Planners, Mothers of East LA, CBE, Union de Vecinos, Friends of Ramona Gardens, California Safe Schools, Liberty Hill Foundation, One LA, California Trucking Association, White Memorial Hospital, California Small Business Alliance, California Council for Environmental and Economic Balance (CCEEB), California Construction and Industrial Materials Association (CALCIMA), Salesian High School, Santa Isabel High School, WSPA, and offices of elected officials.

While the CCP addressed several of the highest priority community issues in Boyle Heights, there are additional air quality issues that remain in Boyle Heights as well as in East Los Angeles, which would be addressed through AB 617 efforts in this community.

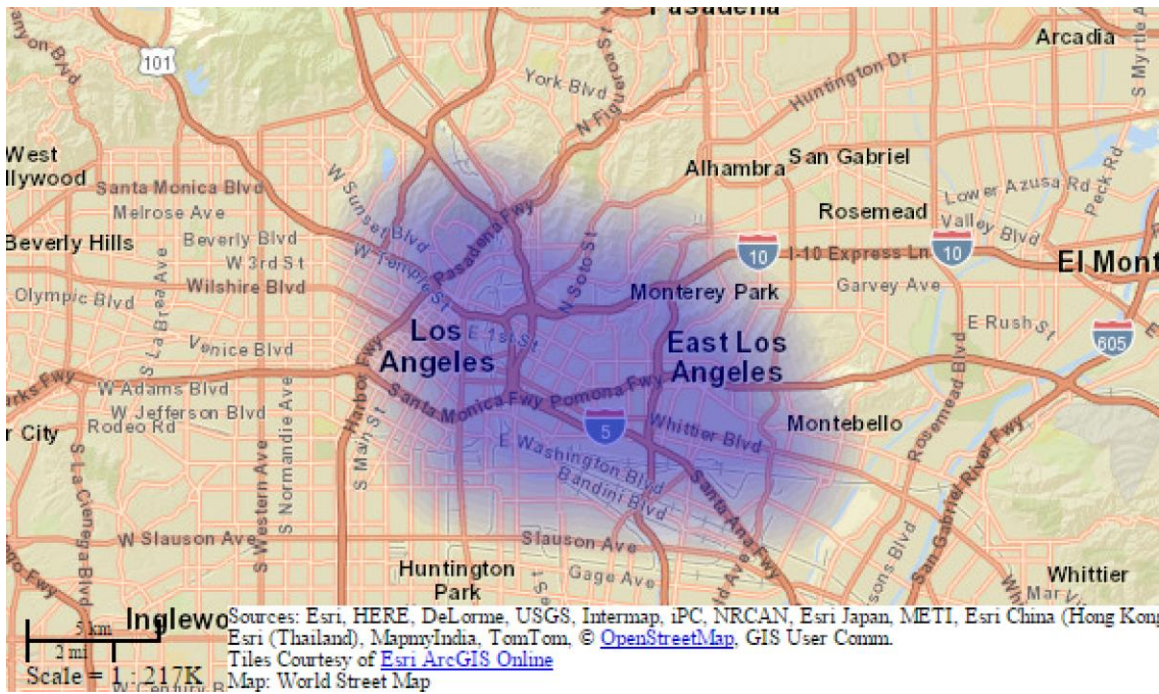


Figure 11: Map showing approximate geographic area of the East Los Angeles and Boyle Heights community

San Bernardino, Muscoy (Figure 12): This Inland Empire community is an area with significant public health burdens, and socioeconomic disadvantages. This community includes a major rail yard and many warehouses. SCAQMD staff previously conducted some air monitoring through the MATES program, which

identified high levels of diesel particulate matter near BNSF rail yard. The community near this rail yard was part of the pilot communities for the SCAQMD Clean Communities Plan, which included significant community engagement efforts, and emissions and exposure reduction efforts (e.g. filtration projects, low-VOC paints). SCAQMD also funded the Environmental Railyard Research Impacting Community Health (ENRRICH) study, which was a community health assessment and public health outreach project led by the late Dr. Sam Soret of Loma Linda University. These efforts have enabled SCAQMD to develop relationships with community leaders and have an understanding of the community's air quality concerns and priorities. The unique information provided through these assessments will help to inform AB 617 efforts to further improve air quality in this disadvantaged area.

Through the CCP, SCAQMD worked with several organizations that work in this community, including the San Bernardino County Transportation Authority (SBCTA), San Bernardino Community College District, San Bernardino Unified School District, California State University San Bernardino, Loma Linda University, Kaiser Hospital, San Bernardino County Department of Public Health, Inland Congregations United for Change (ICUC), California Small Business Alliance, US Green Building Council, Association of American Railroads, California Trucking Association, CCEEB, CALCIMA, Hospital Association of Southern California, California Auto Body Association, BNSF Railway, Southern California Edison, Southern California Gas Company, OmniTrans, Inland Empire African American Chamber of Commerce, the Green Divide, Center for Community Action and Environmental Justice (CCA EJ), Inland Community Collaborative, San Bernardino Catholic Archdiocese, Inland Action, and offices of elected officials.

While the CCP addressed several of the highest priority community issues in the community near the San Bernardino rail yard, there are additional air quality issues that remain in San Bernardino as well as in the neighboring Muscoy area which would be addressed through AB 617 efforts in this community. This community would serve as a statewide model for what can be done near rail yards, which may include exposure reductions in addition to emission reductions. This community was recommended by Assembly Member Reyes and the CCAEJ.

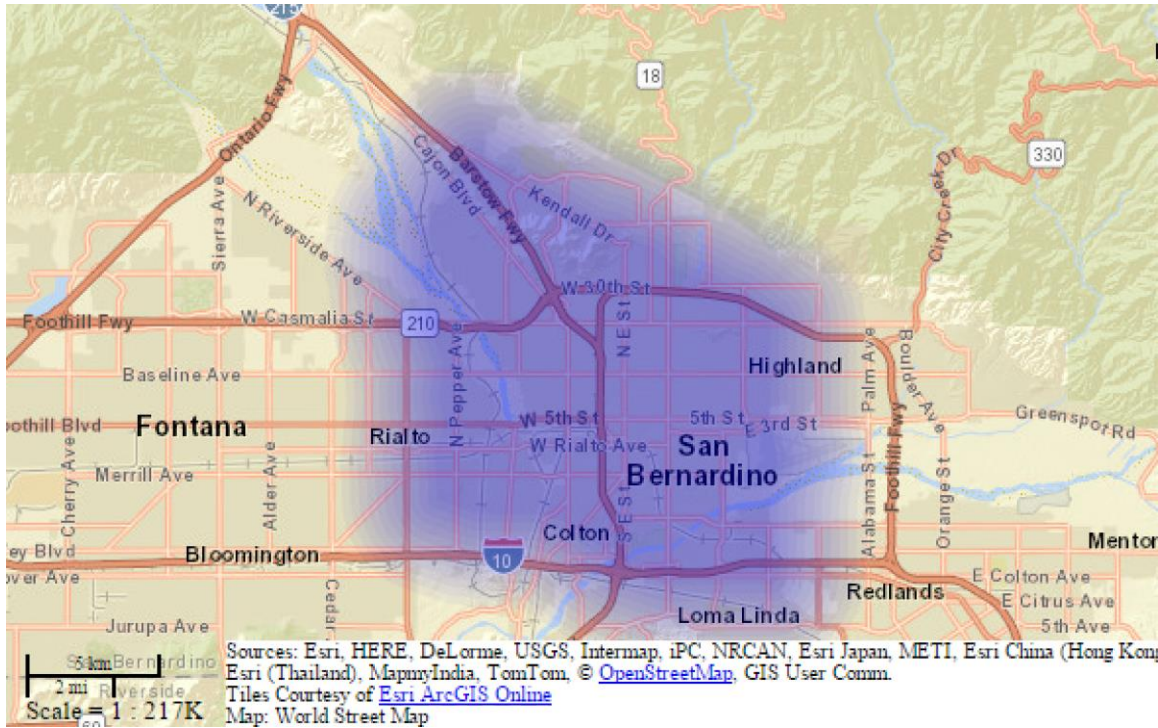


Figure 12: Map showing approximate geographic area of the San Bernardino, Muscoy community

South Gate, Huntington Park, Florence-Firestone, Walnut Park (Figure 13): This southeast Los Angeles community includes part of the Alameda Corridor, an industrial area with a cargo rail line that links the ports area to the rail lines near downtown Los Angeles. There are residential neighborhoods and schools on both sides of the Alameda Corridor, and this community’s school proximity score is in the highest (most impacted) category. This community has very high percentile scores for both MATES IV and CalEnviroScreen 3.0, indicating that this area has a high air toxics burden, as well as impacts from other environmental pollution, public health burdens, and socioeconomic factors. In 2017 and 2018, SCAQMD staff collaborated with the Los Angeles County Department of Public Health in their Community Risk Reduction Initiative in the Florence-Firestone area. Staff is currently conducting air toxics monitoring in Huntington Park as part of MATES V. Previous and current outreach in this community have included the Council of Mexican Federations (COFEM), Los Angeles County Department of Public Health, Florence-Firestone Community Leaders, and offices of elected officials.

This community was recommended by CBE.

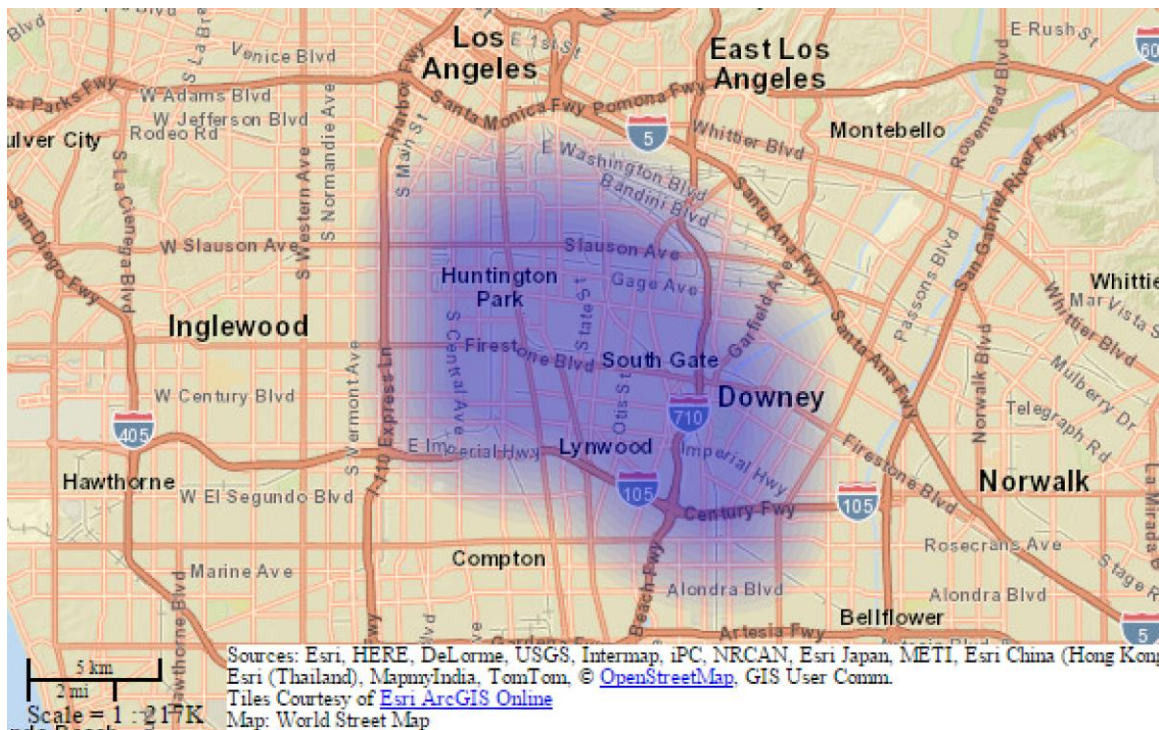


Figure 13: Map showing approximate geographic area of the South Gate, Huntington Park, Florence-Firestone, Walnut Park community

In addition, SCAQMD has already done substantial work in air toxics monitoring and emissions reduction efforts in **Compton** and **Paramount/North Long Beach**. Staff is recommending applying some AB 617 resources to continue investigations into new sources of hexavalent chromium emissions that are applicable to these communities. These studies will be critical in developing future community emissions reduction plans in Years 2-5 or 2-6, as investigations progress.

Resource Needs

The anticipated resource needs for SCAQMD’s ongoing implementation of AB 617 is approximately \$25 million per year, which assumes that two to four new communities are added each year, and each community program is expected to last approximately five years, with a maximum of 14 communities in the program simultaneously. Currently, staff is working with the California State Legislature to set aside \$50 million across Fiscal Year (FY) 19-20 and FY20-21 for air monitoring and plan development efforts at SCAQMD.

SCAQMD implementation costs for future years are dependent on the number of communities that are selected for this program, which is in turn dependent on the amount of funding allocated by the legislature to support AB 617 implementation by the local air districts. Appropriating any future funding for AB 617 or any impacts to SCAQMD’s budget for implementing AB 617 will be brought before the Governing Board for consideration. Staff is not able to provide specific estimates for the anticipated resource needs for each community until additional community input is

received, but will provide refined estimates once work with the community steering committees begins to define the priorities and projects in each community.

Initial Recommendations for Years 2-5 Implementation

The list of communities initially recommended for AB 617 implementation in Years 2-5 (or 2-6, as resources allow) is provided in **Table 3**. Previous or current efforts in these communities, including air monitoring and community programs, are noted briefly in **Table 3**.

To develop final recommendations for implementation of AB 617 in communities beyond Year 1, staff plans to conduct community outreach in future years to receive input to inform these recommendations. Updated information on air pollution impacts, such as results from the MATES V program and other SCAQMD efforts, will also help to inform the prioritization of communities for these future years.

Information Available for Community Level Emissions Inventories or Source Attribution

Emissions Inventory Data Availability for Criteria Air Pollutants

A comprehensive emissions inventory was developed using the most updated data and methodology as part of the 2016 AQMP. The inventory includes 2012 base year and future landmark years that the SCAQMD is required to follow to attain the National Ambient Air Quality Standards. These inventories form the basis for some of the emissions data used in both the MATES and the CalEnviroScreen prioritization metrics described previously.

The emissions inventory is divided into two major source classifications: stationary and mobile sources. The stationary point source emissions are based principally on reported data from facilities using SCAQMD's Annual Emissions Reporting Program. The stationary area source emissions are estimated jointly by CARB staff and SCAQMD staff using various inventory methods such as U.S. EPA AP42 emission factors, survey data, regulatory and reported data, etc. The on-road emissions are calculated using CARB's EMFAC 2014 model and the travel activity data provided by SCAG from their adopted 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). CARB provides emission inventories for off-road equipment which includes construction and mining equipment, industrial and commercial equipment, lawn and garden equipment, agricultural equipment, ocean-going vessels, commercial harbor craft, locomotives, cargo handling equipment, pleasure craft, and recreational vehicles. Aircraft emissions are based on an updated analysis by SCAQMD, developed in conjunction with the airports in the region.

Mobile source categories are the major source of emissions in the SCAB. On-road and off-road mobile sources combined account for 88% and 58% of the total NO_x and VOC emissions, respectively, in 2012. The top ten source contributors to the emissions inventories for NO_x and VOC are provided in **Figure 14** and **Figure 15**, respectively.

Eight out of top 10 NOx emitter categories are mobile sources with heavy-duty diesel trucks, off-road equipment, and ships and commercial boats being the top three. NOx RECLAIM and residential fuel combustion are the only non-mobile categories in the top ten list (**Figure 14**). These top ten categories account for 85% of the total NOx inventory in 2012. VOC inventories have five categories in the top ten list that belong to the mobile source sector (**Figure 15**). Consumer products are the highest emitter of VOCs. Petroleum marketing, coatings and related processes solvents, architectural coatings, and fuel storage and handling as well as mobile source categories are included in the top ten list. The top 10 categories account for 78% of the total VOC inventory in 2012.

While emissions from mobile sources are the predominant source of emissions, individual communities may have higher contributions by stationary sources if they are located close to major industrial and manufacturing facilities, large commercial facilities with backup emergency generators, chemical and metal processing facilities, the aggregation of small industrial facilities located within relatively small area, etc. A community with proximity to major goods movement corridors and warehouses can have higher contribution of mobile source sectors than the SCAB average due to local impacts of enhanced on-road traffic, off-road mobile equipment and all other activities associated with goods movement.

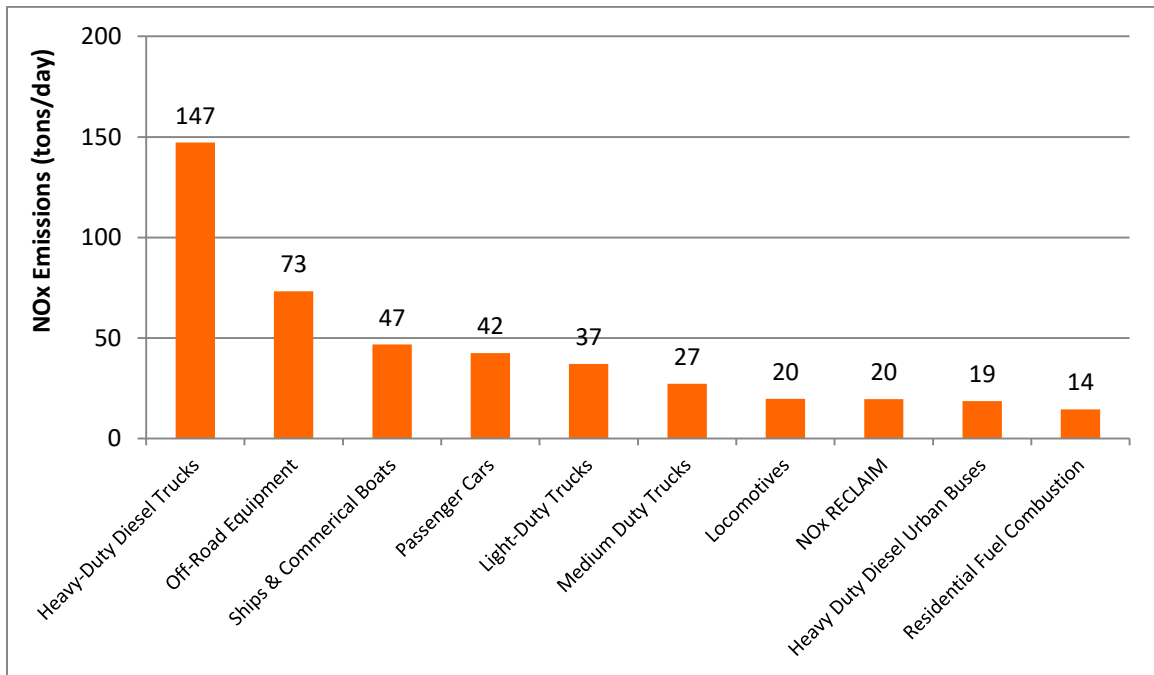


Figure 14: Top Ten Emitter Categories for NOx in 2012 (Summer Planning)

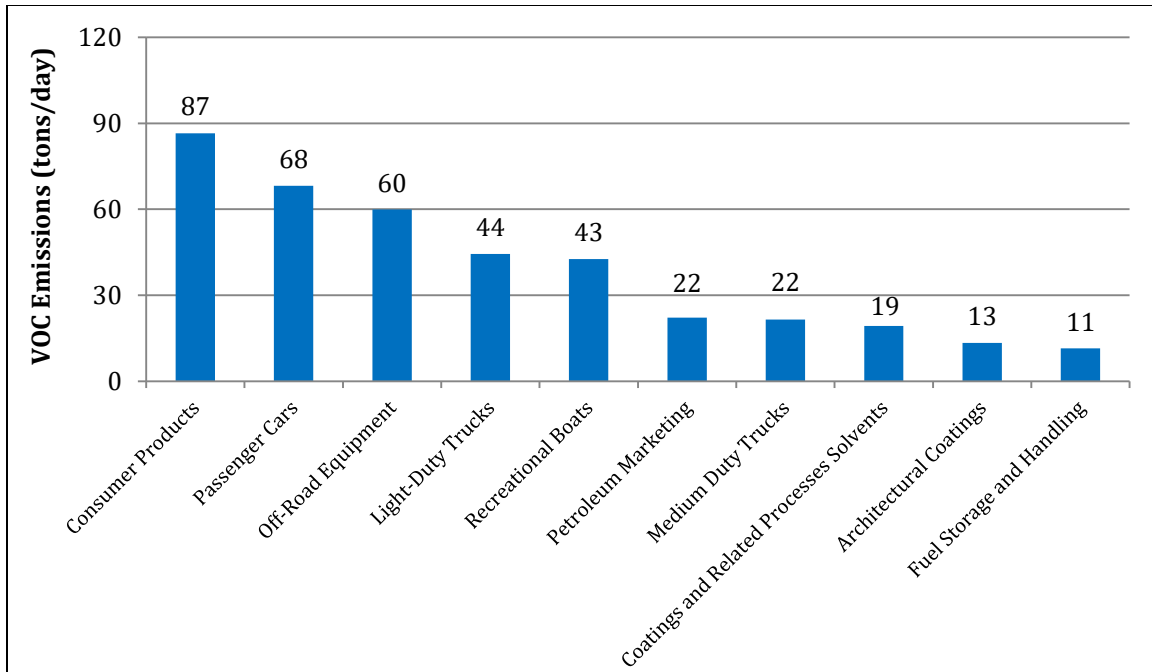


Figure 15: Top Ten Emitter Categories for VOCs in 2012 (Summer Planning)

PM_{2.5} consists of directly emitted primary particles and secondary aerosols that are chemically produced in the atmosphere from its precursors such as NO_x, VOC, SO_x, and NH₃. While the secondary particles account for the majority of the ambient PM_{2.5} concentrations in the SCAB (typically 75% or more), the primary PM_{2.5} are emitted from various categories of anthropogenic activities. The biggest single source of directly emitted PM_{2.5} in the SCAB is commercial cooking, for which under-fired charbroilers are responsible for the majority of the emissions. Followed by commercial cooking are paved road dust, residential fuel combustion and several mobile source categories. The two highest emitters – commercial cooking and paved road dust are expected to emit more PM_{2.5} in future years due to the growth in population and economic activity outpacing the impact of current regulations on these sources. **Figure 16** shows the highest 10 categories directly emitting primary PM_{2.5}. The top 10 categories account for 72% of the total direct PM_{2.5} emissions in the SCAB.

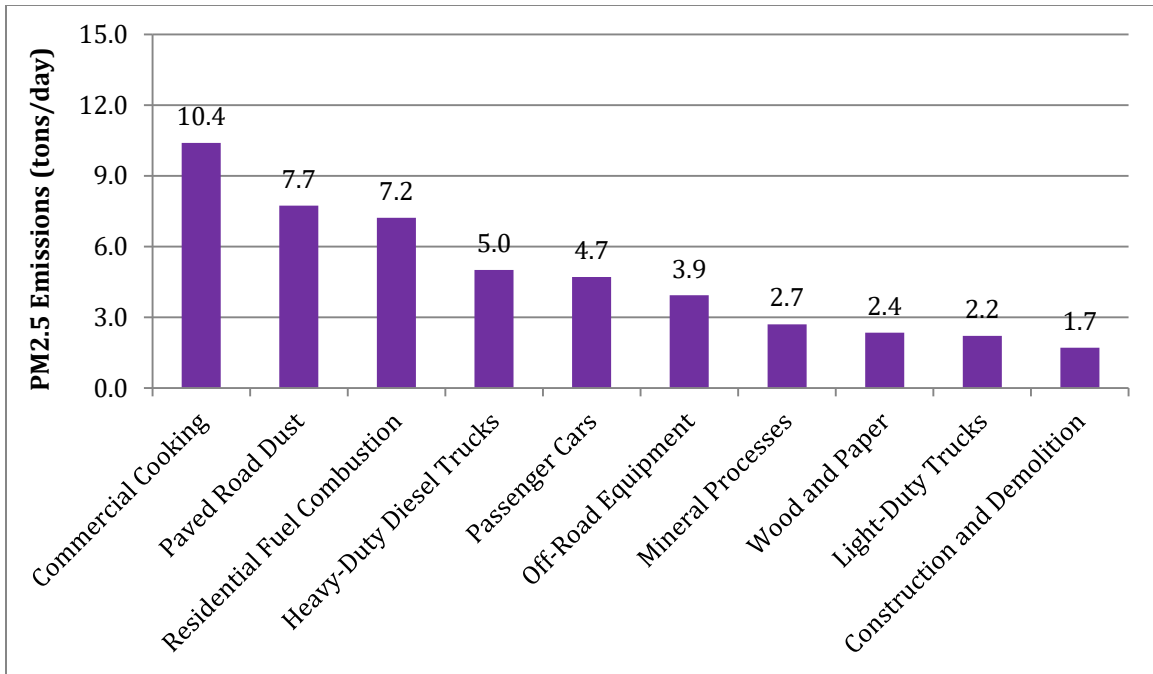


Figure 16: Top Ten Emitter Categories for Directly Emitted PM2.5 in 2012 (2016 AQMP Annual Average Inventory)

Emissions Inventory Data for Air Toxics

A comprehensive toxics emissions inventory was developed using the most updated data and methodology as part of MATES IV. The toxic emissions inventory for MATES IV consists of four components: (1) point sources; (2) area sources; (3) on-road mobile sources; and (4) off-road (or other) mobile sources.

The 2012 inventory used for the MATES IV modeling analysis is projected from the 2008 baseline emissions inventory in the 2012 AQMP. Toxic emissions are calculated by applying the latest CARB chemical speciation profiles to hydrocarbon and particulate matter emissions. Speciation profiles provide estimates of the emission's chemical composition. CARB maintains and updates the chemical composition and size fractions of particulate matter and the chemical composition and reactive fractions of total organic gases for a variety of emission source categories. The source type (e.g., equipment and fuel) is used to identify the appropriate speciation profile.

Further details on the data and methodology of the toxics emissions inventory are provided in the MATES IV final report and appendices. Overall, in the SCAB, on-road and off-road mobile sources dominate the air toxics cancer risk (**Figure 17**).

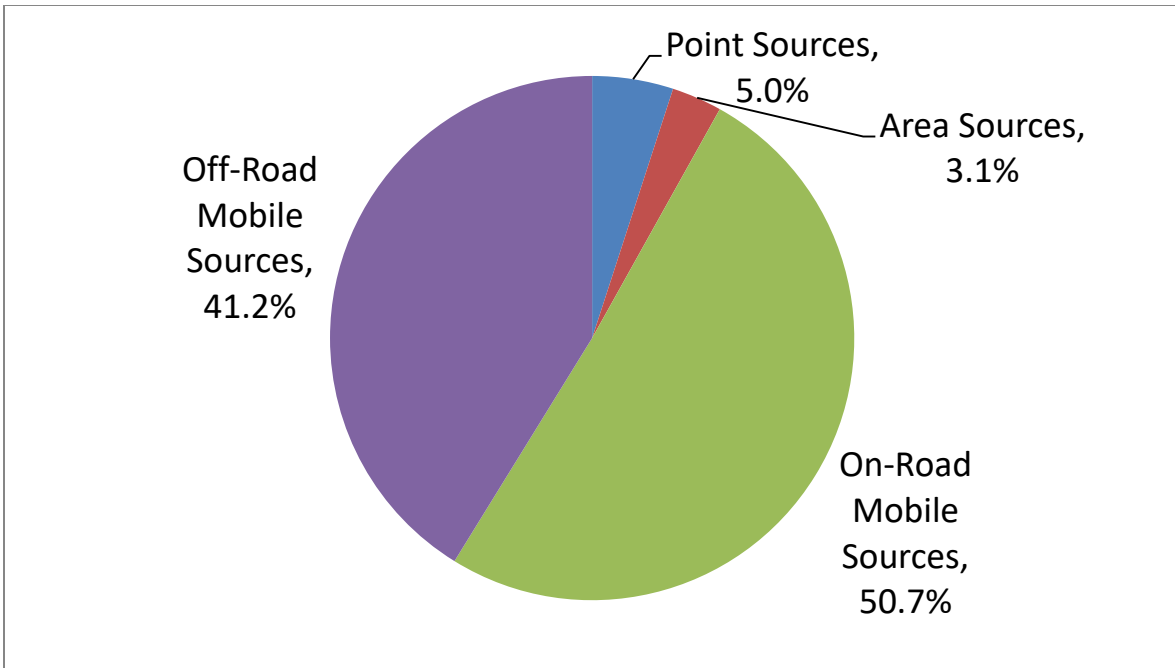


Figure 17: Cancer Potency Weighted Source Apportionment for 2012 Emissions

It is important to note that the MATES IV toxics emissions inventory reflects regional estimates of air toxics and that such modeling may not capture local variations in air toxics (at scales of a mile or less) that could be important. However, continual improvements in data sources and modeling methodologies enhance our ability to provide more localized air toxics information. SCAQMD began MATES V in 2018, and proposes to implement several key improvements to the emissions inventory, including developing local-scale risk estimates, which may help to inform future AB 617 efforts. Data improvements include integrating SCAQMD permit information to capture emissions information from smaller facilities, real-time traffic sensor data for more precise traffic location information, ship emissions based on GPS location and the Automatic Identification System, and data on aircraft activity, take-off and landing emissions based on actual flight path, runway and take-off/landing tracks. In addition, air toxics emissions are reported on an annual or quadrennial schedule for facilities that are in the AB 2588 Air Toxics Hot Spots core program. These data are available on a facility-by-facility basis, and would help inform air toxics estimates at a local scale in communities that are near these sources. The new toxics inventory approach for the MATES V risk estimation will be developed by combining reported emissions with the chemical speciation approach.

Conclusion and Next Steps

In the coming months, SCAQMD staff will conduct targeted community outreach in the Year 1 communities and establish a steering committee for each community. Staff will also continue working toward securing sustained future funding for

implementation of AB 617, which will determine the extent of the efforts (e.g. number of communities) that are feasible. In September, CARB will consider these recommendations as part of their statewide strategy, and SCAQMD staff looks forward to working with CARB staff on the implementation of AB 617 in these communities.

Appendices

Appendix A: Community Profiles

Appendix B: Outreach Materials



Appendix A

Community Recommendations for AB 617 Implementation



Assembly Bill 617 (AB 617) **South Coast Air Quality Management District**

This appendix provides profiles of each community recommended for Year 1 of AB 617 implementation. Each profile includes a summary of the community's location, land use information (top four or five categories), the CalEnviroScreen 3.0 overall score percentile, MATES IV overall cancer risk percentile, CalEnviroScreen 3.0 diesel particulate matter percentile, school proximity to industrial sources and freeways score percentile as well as a summarized list of the number of air pollution sources in the community. In addition, a list of the regulatory monitors that currently exist and special monitoring studies that occur or have occurred in the past in or near the community are provided. Each profile also includes a brief paragraph on incentive programs in the community and previous emission reduction plans. This appendix only includes the community profiles for the top four recommended communities (Year 1), the final submittal to CARB will include additional profiles of communities that will be considered in subsequent years.

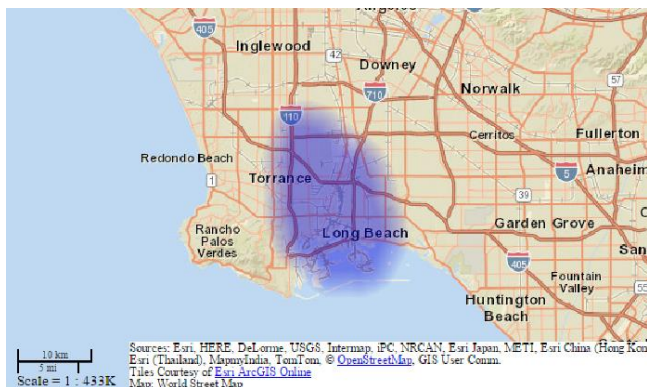
Identification and prioritization summary

The prioritization steps were as follows:

- Step 1: Identify communities with the community's maximum census tract scores for CalEnviroScreen 3.0, MATES IV, and the school proximity to industrial sources and freeways metric.
- Step 2: Prioritize communities using a sensitivity analysis based on:
 - The community's average census tract score for each listed metric; and
 - The community's average census tract score from CalEnviroScreen 3.0 air quality factors only.
- Step 3: Account for community self-recommendations.

The average scores in a given community were calculated using a population-weighted average, by multiplying population by the CalEnviroScreen 3.0 and MATES IV score, respectively, and dividing by the total population in the community. The population data for each census tract was obtained directly from CalEnviroScreen 3.0. The average value within SCAQMD's jurisdiction is also provided for reference (orange column). The population weighted cancer risk from MATES IV was estimated to be 897 per million for the SCAB using the current OEHHA (Office of Environmental Health Hazard Assessment) methodology (revised in 2015). This corresponds to an approximately 43.4 percentile value for all the areas within SCAQMD's jurisdiction.

Wilmington, West Long Beach, Carson



About this Community

The neighborhood of Wilmington within the City of Los Angeles, the City of Carson, and the neighborhood of West Long Beach within the City of Long Beach, are in an area where the land use is 29% residential, 25% industrial, 17% transportation, communications & utility, and 12% commercial. The areas have a combined population of 261,267, including people who identify their race/ethnicity as Hispanic (53.5%), Asian American (17.6%), African American (15.4%), and White (10.9%). This area ranks in the 84.8th percentile for CalEnviroScreen 3.0, 89.5th percentile for SCAQMD's MATES IV, and 82.2nd percentile for diesel particulate matter. Within this same area, there are several rail yards, 54 Title V facilities, 38 facilities in the AB 2588 core program, and eight industrial facilities that regularly process chemicals such as hexavalent chromium, lead, and arsenic and five refineries that emit volatile organic compounds (VOC), NOx and SOx.

AB 617 Community Prioritization

Prioritization Criteria	Community Average	Community Maximum	Average in SCAQMD's Jurisdiction
MATES IV Cancer Risk [percentile]	89.5	100	43.4
CalEnviroScreen 3.0 Overall Score [percentile]	84.8	98.8	60.2
Ozone [percentile]	32		66.1
PM2.5 [percentile]	68.2		68.4
Diesel Particulate Matter [percentile]	82.2		58.0
Schools and Daycares Near Industrial Sources or Freeways [score]	38.93	644.1	
Community Nominated	Yes		
Overall Prioritization	Year 1 community		

Regulatory monitors in or near the Community

Long Beach (Hudson): CO, NOx, O3, SO2, PM10

North Long Beach: PM2.5

South Long Beach: PM10, lead (Pb), PM2.5, continuous PM2.5

Long Beach – I-710 Near Road Site: NOx, PM2.5, continuous PM2.5

Special monitoring studies in or near the Community

Multiple Air Toxics Exposure Study (MATES)

MATES is a health study involving an air monitoring program that includes monitoring for air toxic contaminants at ten stations in the SCAB for a one to two year period, to characterize long-term regional air toxics levels in residential and commercial areas. Currently MATES V Study is underway, beginning in January 2018 and will continue until March 2019. The study is a follow up to previous air toxics studies in the SCAB. MATES IV was conducted between July 2012 and July 2013. More information on MATES can be found at: <http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies>.

MATES includes a fixed site monitoring program with ten stations, including the Long Beach (Hudson) and South Long Beach stations, an updated emissions inventory of toxic air contaminants, and a modeling effort to characterize risk across the SCAB. More information about these stations can be found at: <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-monitoring-network-plan>.

Fenceline Monitoring (Fluxsense Study): In the fall of 2015 the SCAQMD conducted three optical remote sensing (ORS) projects to characterize emissions from refineries, small stationary sources, marine vessels, and the ports. Modern atmospheric ORS techniques offer unique capabilities for monitoring trace gas emissions from point and area sources in near-real time. A presentation summarizing the main findings of the three 2015 ORS projects can be found at <http://www.aqmd.gov/docs/default-source/Agendas/ssc/presentation-placeholder.pdf?sfvrsn=8> . These three projects are:

Project 1: Quantification of Fugitive Emissions from Large Refineries

Project 2: Quantification of Gaseous Emissions from Gas Stations, Oil Wells, and Other Small Point Sources

Project 3: Quantification of Stack Emissions from Marine Vessels

Southern California International Gateway (SCIG) Study

SCIG facility is a proposed intermodal facility in the City of Los Angeles about four miles north of the Ports of Long Beach and Los Angeles and adjacent to the Alameda Corridor. SCAQMD conducted a measurement campaign near the proposed SCIG facility at a veterans housing facility (The Villages at Cabrillo) to measure NO_x, CO, and PM_{2.5} concentrations.

Sampling period: 10/2012 to 2/2017

Pollutants measured: NO_x, CO, PM_{2.5}

Diesel Particulate Matter Incentive Programs in the Community

Goods Movement Emission Reduction Projects (Prop. 1B Program)

The Prop. 1B Program provides funding for projects that reduce emissions from goods movement operations. Emissions from diesel equipment, locomotives and vehicles involved in goods movement greatly impact the health of communities located near ports, rail yards, distribution centers and roads with high truck traffic. The Prop. 1B Program is intended to reduce diesel air pollution from goods movement operations and achieve the earliest possible health risk reduction in nearby communities.

Voucher Incentive Program (VIP)

The VIP is a streamlined approach to reduce emissions by replacing old, high-polluting vehicles with newer, lower-emission vehicles. This program is limited to owners/operators with fleets of 10 or fewer vehicles that have been operating at least 75% (mileage-based) in California during the previous 24 months. The goal of this program is to reduce emissions from in-use heavy-duty trucks in small fleets by replacing Engine Model Years 2009 and older with Engine Model Years 2013 (or newer) emissions compliant models.

Carl Moyer Program (CMP)

The purpose of the CMP is to obtain emission reductions of NO_x, PM₁₀ and Reactive Organic Gases (ROG) from heavy-duty vehicles and other equipment operating in California as early and as cost-effectively as possible. The CMP provides financial incentives to assist in the purchase of cleaner-than-required engine and equipment technologies to achieve emission reductions that are real, surplus, quantifiable and enforceable.

Clean School Buses

Under this program SCAQMD provides substantial incentives to public school districts to purchase new very clean natural gas buses and low-emitting diesel buses. SCAQMD has provided further incentives to both school districts and private operators to install particulate trap filters that eliminate 85 percent or more of particulates in diesel exhaust. As of 2016, SCAQMD has awarded nearly \$300 million to replace nearly 1,600 pre-1994 school buses with clean alternative school buses having the latest safety features. Overall, as a result of these awards, about 4,900 school buses are currently operating that meet stringent air quality standards. At about 60 to 70 kids being transported per bus, this translates to nearly 300,000 kids traveling daily in some of the cleanest school buses in the country, the vast majority of them in Environmental Justice areas. The SCAQMD program is, thus, the largest of its kind in the country.

Other Incentive Programs in the Community

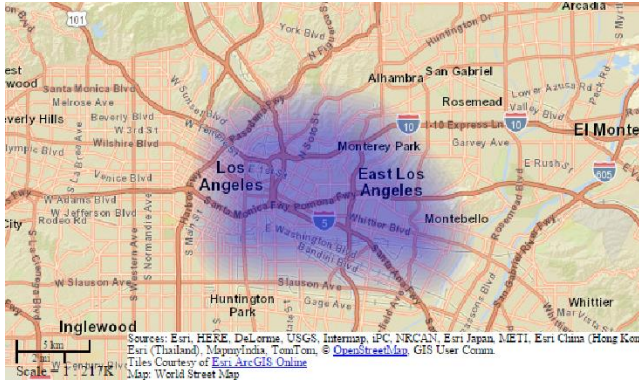
School Filtration and Weatherization

SCAQMD has worked with school districts and EJ organizations since 2007 to install air filtration systems in schools and community centers. Air filtration technologies such as high performance panel filters and stand-alone units have been successfully demonstrated in classroom environments to achieve at least a 90% average removal efficiency of ultrafine PM and black carbon. To date, air filtration has been installed in 24 schools and community centers in EJ and Disadvantaged Communities in Long Beach and Wilmington.

Previous Emission Reduction Plans

Niklor Chemical Company was a chemical and allied products facility subject to AB 2588 located at 2060 East 220th Street in Carson, CA 90745. According to a Health Risk Assessment completed in 2002, the main driver for chronic and acute risk was chloropicrin. A Risk Reduction Plan was approved in 2002, but the facility has since closed permanently and no longer has active SCAQMD permits.

East Los Angeles, Boyle Heights



About this Community

The unincorporated area of East Los Angeles and the neighborhood of Boyle Heights, located within the City of Los Angeles, are in an area where the combined land use is an estimated 45% residential, 21% commercial, 14% industrial, and 11% transportation, communications and utility. This areas has a population of 229,723 including people who identify their race/ethnicity as Hispanic (92.5%), White (2.7%), Asian American (2.3%), and African American (1.8%). This region ranks in the 90.2nd percentile for CalEnviroScreen 3.0, 93.6th percentile for SCAQMD’s MATES IV, and 92.7th percentile for diesel particulate matter. Within this area, there are 14 industrial facilities that regularly process chemicals such as hexavalent chromium, lead, and arsenic. There are also several rail yards, 10 Title V facilities and six facilities in the AB 2588 core program.

AB 617 Community Prioritization

Prioritization Criteria	Community Average	Community Maximum	Average in SCAQMD’s Jurisdiction
MATES IV Cancer Risk [percentile]	93.6	99.4	43.4
CalEnviroScreen 3.0 Overall Score [percentile]	90.2	99.9	60.2
Ozone [percentile]	53.2		66.1
PM2.5 [percentile]	89.2		68.4
Diesel Particulate Matter [percentile]	92.7		58.0
Schools and Daycares Near Industrial Sources or Freeways [score]	259.2	1354	
Community Nominated	Yes		
Overall Prioritization	Year 1 community		

Regulatory monitors in or near the Community

Los Angeles: CO, NOx, NOy*, O3, SO2, PM2.5, PM10, Lead (Pb), continuous PM2.5, continuous PM10, speciated PM2.5, VOCs, multi-metals, hexavalent chromium (Cr6+), carbonyls, PAHs, black carbon (BC), total carbon (TC)

Central Los Angeles Station is a central urban core site in Los Angeles that reflects concentrations and trends due primarily to urban mobile source emissions. Central Los Angeles site is part of STN, NCore, NATTS, and PAMS network.

PM2.5 Speciation Trends Network (STN): The PM2.5 chemical speciation urban trends sites include analysis for elements, selected anions, cations, and carbon.

NCore Multipollutant Monitoring Network: is a multi-pollutant network that integrates several advanced measurement systems for particles, pollutant gases and meteorology.

National Air Toxics Trends Station (NATTS): The NATTS program was developed to fulfill the need for long-term Hazardous Air Pollutant monitoring data of consistent quality nationwide. NATTS monitoring began in February 2007 at the Central Los Angeles station and continues.

Photochemical Assessment Monitoring Stations (PAMS): to provide an air quality database of ozone and ozone precursors and to track VOC and NOx emission inventory reductions.

Special monitoring studies in or near the Community

Multiple Air Toxics Exposure Study (MATES)

MATES is a health study involving an air monitoring program that includes monitoring for air toxic contaminants at ten stations in the SCAB for a one to two year period, to characterize long-term regional air toxics levels in residential and commercial areas. Currently MATES V Study is underway, beginning in January 2018 and will continue until March 2019. The study is a follow up to previous air toxics studies in the SCAB. MATES IV was conducted between July 2012 and July 2013. More information on MATES IV can be found at: <http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies>.

NOy*: Sum of NOx and other nitrogen reactive species

MATES includes a fixed site monitoring program with ten stations, including the [Central Los Angeles](#) station, an updated emissions inventory of toxic air contaminants, and a modeling effort to characterize risk across the SCAB.

[Ambient Measurements of Air Toxic Pollutants at Resurrection Catholic School in Boyle Heights](#)

Following numerous requests from concerned residents and community leaders, SCAQMD began a comprehensive year-long monitoring study in April of 2009 of air toxic levels at the Resurrection Catholic School in Boyle Heights, in an area impacted by both local and regional pollution sources. More information about this study can be found at:

<http://www.aqmd.gov/docs/default-source/air-quality/air-quality-monitoring-studies/bhpilotstudy-resurrection-catholic-school.pdf>.

Sampling period: 4/1/2009 to 6/1/2010

Pollutants measured: PM2.5, PM10, EC, BC, Cr6+, Pb, Trace Metals, VOC and Carbonyls

[Exide Technologies](#)

Exide Technologies is a secondary lead smelting facility that recovered lead from recycled automotive batteries and is located in Vernon, just outside of this community (less than 1,500 ft). The facility began operations in 1922, underwent major modernization and reconstruction in the 1980s, and was acquired by Exide Technologies in 2000 and last conducted recycling operations in March 2014. The facility was closed in 2015 and is currently proceeding with facility closure under a DTSC Closure Plan (more information:

https://www.dtsc.ca.gov/HazardousWaste/Projects/upload/Exide-ClosurePlan_MainText.pdf). The facility continues to be subject to many SCAQMD rules and permit conditions, including ambient monitoring, to ensure that they operate in compliance with air pollution requirements. SCAQMD currently operates three lead monitors at different distances from Exide Technologies facility's perimeter. In addition, Exide operates six fence-line lead monitors near the property line to satisfy the monitoring requirements of Rule 1420.1. Emissions from Exide Technologies or transport of re-suspended particles containing lead from the Exide facility could impact this community.

Sampling period: 11/2007 to present

Pollutants measured: Pb and As

[Boyle Heights Microscale Air Quality Study](#)

As part of SCAQMD's Children's Air Quality Agenda, and following community concerns about significant diesel activity in the area, SCAQMD conducted a two-month (June 29 to August 16, 2000) sampling program measuring VOCs, carbonyl compounds, elemental carbon, hexavalent chromium and PM2.5 on the grounds of Salesian High School in Boyle Heights. This effort was followed by an additional two-month monitoring program from December 2000 to February 2001 to assess PM10 levels and elemental carbon as an indicator of diesel soot.

[Goods Movement Emission Reduction Projects \(Proposition 1B Program\)](#)

The Prop. 1B Program provides funding for projects that reduce emissions from goods movement operations. Emissions from diesel equipment, locomotives and vehicles involved in goods movement greatly impact the health of communities located near ports, rail yards, distribution centers and roads with high truck traffic. The Prop. 1B Program is intended to reduce diesel air pollution from goods movement operations and achieve the earliest possible health risk reduction in nearby communities.

[Voucher Incentive Program \(VIP\)](#)

The VIP is a streamlined approach to reduce emissions by replacing old, high-polluting vehicles with newer, lower-emission vehicles. This program is limited to owners/operators with fleets of 10 or fewer vehicles that have been operating at least 75% (mileage-based) in California during the previous twenty four (24) months. The goal of this program is to reduce emissions from in-use heavy-duty trucks in small fleets by replacing Engine Model Years 2009 and older with Engine Model Years 2013 (or newer) emissions compliant models.

[Carl Moyer Program \(CMP\)](#)

The purpose of the CMP is to obtain emission reductions of Nitrogen Oxides (NOx), Particulate Matter (PM10) and Reactive Organic Gases (ROG) from heavy-duty vehicles and other equipment operating in California as early and as cost-

effectively as possible. The CMP provides financial incentives to assist in the purchase of cleaner-than-required engine and equipment technologies to achieve emission reductions that are real, surplus, quantifiable and enforceable.

Clean School Buses

Under this program SCAQMD provides substantial incentives to public school districts to purchase new very clean natural gas buses and low-emitting diesel buses. SCAQMD has provided further incentives to both school districts and private operators to install particulate trap filters that eliminate 85 percent or more of particulates in diesel exhaust. As of 2016, SCAQMD has awarded nearly \$300 million to replace nearly 1,600 pre-1994 school buses with clean alternative school buses having the latest safety features. Overall, as a result of these awards, about 4,900 school buses are currently operating that meet stringent air quality standards. At about 60 to 70 children being transported per bus, this translates to nearly 300,000 children traveling daily in some of the cleanest school buses in the country, the vast majority of them in Environmental Justice areas. The SCAQMD program is, thus, the largest of its kind in the country.

Other Incentive Programs in the Community

School Filtration and Weatherization

SCAQMD has worked with school districts and EJ organizations since 2007 to install air filtration systems in schools and community centers. Air filtration technologies such as high performance panel filters and stand-alone units have been successfully demonstrated in classroom environments to achieve at least a 90% average removal efficiency of ultrafine PM and black carbon. To date, air filtration has been installed in 14 schools and community centers in EJ and Disadvantaged Communities in Boyle Heights.

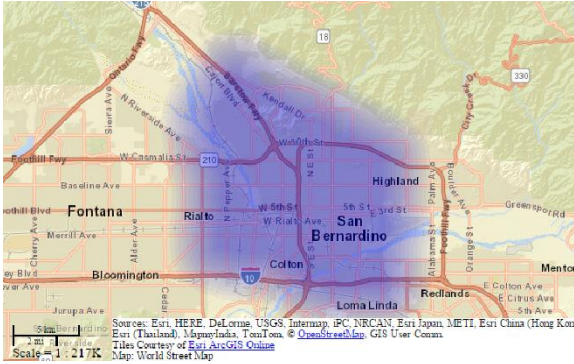
Previous Emissions Reduction Plans

Grover Products Company is an industrial machinery facility located at 3424 East Olympic Boulevard, Los Angeles, CA 90023. As part of the AB 2588 program requirements, a Health Risk Assessment (HRA) was prepared in 2000, and the facility was required to implement a Risk Reduction Plan (RRP), which was approved in 2001 and implemented subsequently. The main risk drivers were hexavalent chromium and nickel.

Exide Technologies (Exide) is a secondary lead smelting facility that was in operation at 2700 South Indiana Street in Vernon, south of Boyle Heights. In 2012, an HRA performed identified arsenic as a main risk driver, and in 2015, this facility was required to stop operations as part of a Federal legal settlement. Exide is currently subject to Phase I closure activities in accordance with the Exide Vernon Closure Plan, approved by the Department of Toxic Substance Control (DTSC) in 2016. The facility is still subject to many SCAQMD rules and permit conditions, including ambient monitoring, to ensure the clean-up procedure is in compliance with SCAQMD rules.

Boyle Heights was selected as one of two communities for the 2010 SCAQMD Clean Communities Plan. This project aimed to reduce the exposure to air toxics, with an emphasis on cumulative impacts. SCAQMD worked with community stakeholders to identify and develop community-based solutions. The initial approach consisted of bi-monthly working group meetings for first two years to collect input. This working group included environmental and community organizations, business environmental groups, elected officials, and public agencies. Input was also collected through community representative interviews and a community bus tour. Main emissions and exposure reduction strategies included funding for cleaner diesel trucks; weatherization of homes near roadways and diesel sources; air filtration in schools and one child development center; replacement of old diesel trucks with CNG trucks; consulting services on a CNG fueling station design; “no-fault” inspections; regulatory compliance education as well as workshops on air pollution controls and pollution prevention with a focus on auto-body shops; the distribution of laser-guided paint spray guns and aqueous brake cleaners to local auto body and repair shops; amendments to Rule 1420.1 (emission standards for lead and other toxic air contaminants from large lead-acid battery recycling facilities); adoption of Rule 415 (odors from rendering facilities); and collaboration with DTSC on Exide facility closing activities. SCAQMD also provided assistance and funding to replace boilers at the Los Angeles County USC Medical Center to improve efficiency.

San Bernardino, Muscoy



About this Community

The city of San Bernardino and the adjacent unincorporated community of Muscoy, are in an area where land use is 45% residential, 20% vacant, 18% commercial, 7% industrial and 5% transportation, communications and utility. This area has a population of 152,461, including people who identify their race/ethnicity as Hispanic (68.4%), White (12.9%), and African American (12.8%). This region ranks in the 92nd percentile for CalEnviroScreen 3.0, 33rd percentile for SCAQMD's MATES IV, and 74.3rd percentile for diesel particulate matter. Within this area, there is one Title V facility, one rail yard, and multiple warehouses.

AB 617 Community Prioritization

Prioritization Criteria	Community Average	Community Maximum	Average in SCAQMD's Jurisdiction
MATES IV Cancer Risk [percentile]	33.0	51.3	43.4
CalEnviroScreen 3.0 Overall Score [percentile]	92.0	99.7	60.2
Ozone [percentile]	98.7		66.1
PM2.5 [percentile]	83.6		68.4
Diesel Particulate Matter [percentile]	74.3		58.0
Schools and Daycares Near Industrial Sources or Freeways [score]	109.3	622.0	
Community Nominated	Yes		
Overall Prioritization	Year 1 community		

Regulatory Monitors in or near the Community

San Bernardino: CO, NO₂, O₃, PM_{2.5}, continuous PM₁₀, Lead (Pb)

Special monitoring studies in or near the Community

Multiple Air Toxics Exposure Study (MATES)

MATES is a health study involving an air monitoring program that includes monitoring for air toxic contaminants at ten stations in the SCAB for a one to two year period, to characterize long-term regional air toxics levels in residential and commercial areas. Currently MATES V Study is underway, beginning in January 2018 and will continue until March 2019. The study is a follow up to previous air toxics studies in the SCAB. MATES IV was conducted between July 2012 and July 2013. More information on MATES IV can be found at: <http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies>.

MATES includes a fixed site monitoring program with 10 stations, including the San Bernardino station, an updated emissions inventory of toxic air contaminants, and a modeling effort to characterize risk across the SCAB. More information on the station can be found here: <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-monitoring-network-plan/aaqmnp-sanbernardino.pdf?sfvrsn=16>

MATES IV San Bernardino Railyard Microscale Study

A unique set of rapidly deployable air toxics monitoring platforms using the latest technologies for continuous measurements of black carbon and ultrafine particulate matter concentrations were deployed in the communities near the San Bernardino Railyard as part of the MATES IV Microscale Study. This study was designed to characterize ambient air pollutant levels associated with the complex mix of many sources of emissions, including trains, terminal operations, and on-road vehicles, particularly heavy-duty diesel trucks in the communities surrounding this facility.

San Bernardino, Muscoy

Diesel Particulate Matter Incentive Programs in the Community

Goods Movement Emission Reduction Projects (Prop. 1B Program)

The Prop. 1B Program provides funding for projects that reduce emissions from goods movement operations. Emissions from diesel equipment, locomotives and vehicles involved in goods movement greatly impact the health of communities located near ports, rail yards, distribution centers and roads with high truck traffic. The Prop. 1B Program is intended to reduce diesel air pollution from goods movement operations and achieve the earliest possible health risk reduction in nearby communities.

Voucher Incentive Program (VIP)

The VIP is a streamlined approach to reduce emissions by replacing old, high-polluting vehicles with newer, lower-emission vehicles. This program is limited to owners/operators with fleets of 10 or fewer vehicles that have been operating at least 75% (mileage-based) in California during the previous 24 months. The goal of this program is to reduce emissions from in-use heavy-duty trucks in small fleets by replacing Engine Model Years 2009 and older with Engine Model Years 2013 (or newer) emissions compliant models.

Carl Moyer Program (CMP)

The purpose of the CMP is to obtain emission reductions of NO_x, PM₁₀ and Reactive Organic Gases (ROG) from heavy-duty vehicles and other equipment operating in California as early and as cost-effectively as possible. The CMP provides financial incentives to assist in the purchase of cleaner-than-required engine and equipment technologies to achieve emission reductions that are real, surplus, quantifiable and enforceable.

Clean School Buses

Under this program SCAQMD provides substantial incentives to public school districts to purchase new very clean natural gas buses and low-emitting diesel buses. SCAQMD has provided further incentives to both school districts and private operators to install particulate trap filters that eliminate 85 % or more of particulates in diesel exhaust. As of 2016, SCAQMD has awarded nearly \$300 million to replace nearly 1,600 pre-1994 school buses with clean alternative school buses having the latest safety features. Overall, as a result of these awards, about 4,900 school buses are currently operating that meet stringent air quality standards. At about 60 to 70 kids being transported per bus, this translates to nearly 300,000 kids traveling daily in some of the cleanest school buses in the country, the vast majority of them in Environmental Justice areas. The SCAQMD program is, thus, the largest of its kind in the country.

Other Incentive Programs in the Community

School Filtration and Weatherization

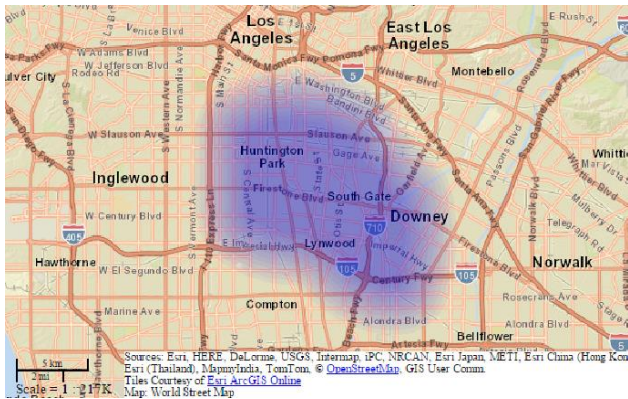
SCAQMD has worked with school districts and EJ organizations since 2007 to install air filtration systems in schools and community centers. Air filtration technologies such as high performance panel filters and stand-alone units have been successfully demonstrated in classroom environments to achieve at least a 90% average removal efficiency of ultrafine PM and black carbon. To date, air filtration has been installed in five schools and community centers in disadvantaged communities in San Bernardino.

Previous Emissions Reduction Plans

San Bernardino was selected as one of two communities for the 2010 SCAQMD Clean Communities Plan. This project aimed to reduce exposure to air toxics, with an emphasis on cumulative impacts. SCAQMD worked with community stakeholders to identify and develop community-based solutions. The initial approach consisted of bi-monthly working group meetings for first two years to collect input. This working group included environmental and community organizations, business, environmental groups, elected officials, and public agencies. Input was also collected through community representative interviews and a community bus tour. Main emissions and exposure reduction strategies included funding for cleaner diesel trucks (especially in warehouses); the replacement of old switch locomotives at BNSF San Bernardino rail yard; weatherization of homes near roadways and other diesel sources; air filtration in schools; “no-fault” inspections; regulatory compliance education as well as workshops on air pollution controls and pollution prevention with a focus on auto-body shops and the distribution of laser-guided paint spray guns and aqueous brake cleaners to local auto body and repair shops.

In addition, SCAQMD also provided funds for the City and County of San Bernardino as well as the San Bernardino Police Department and the San Bernardino International Airport Authority Commission for several commercial electric lawnmowers.

South Gate, Huntington Park, Florence-Firestone, Walnut Park



About this Community

The cities of South Gate and Huntington Park, and the unincorporated neighborhoods of Florence-Firestone and Walnut Park, are located within the County of Los Angeles, in an area where the land use is 55% residential, 17% commercial, 16% industrial, and 6% transportation, communication, and utility. The four areas have a combined population of 234,233, including people who identify their race/ethnicity as Hispanic (94.2%), African American (2.7%), and White (2%). This region ranks in the 90.8th percentile for CalEnviroScreen 3.0, 86.5th percentile for SCAQMD's MATES IV, and 69.7th percentile for diesel particulate matter. Within this area, there are 22 industrial facilities that regularly process chemicals such as hexavalent chromium, lead, and arsenic. There are also several rail yards, 11 facilities in the AB 2588 core program, 10 Title V facilities, and three Superfund sites.

AB 617 Community Prioritization

Prioritization Criteria	Community Average	Community Maximum	Average in SCAQMD's Jurisdiction
MATES IV Cancer Risk [percentile]	86.5	98.3	43.4
CalEnviroScreen 3.0 Overall Score [percentile]	90.8	99.7	60.2
Ozone [percentile]	46.3		66.1
PM2.5 [percentile]	82.1		68.4
Diesel Particulate Matter [percentile]	69.7		58.0
Schools and Daycares Near Industrial Sources or Freeways [score]	215.7	1755.3	
Community Nominated	Yes		
Overall Prioritization	Year 1 As funding allows		

Regulatory monitors in or near the Community

Compton: CO, NOx, O3, Lead (Pb), PM2.5

Special monitoring studies in or near the Community

Multiple Air Toxics Exposure Study (MATES)

MATES is a health study involving an air monitoring program that includes monitoring for air toxic contaminants at ten stations in the SCAB for a one to two year period, to characterize long-term regional air toxics levels in residential and commercial areas. Currently MATES V Study is underway, beginning in January 2018 and will continue until March 2019. The study is a follow up to previous air toxics studies in the SCAB. MATES IV was conducted between July 2012 and July 2013. More information on MATES can be found at: <http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies>.

MATES includes a fixed site monitoring program with 10 stations, including the Compton and Huntington Park stations, an updated emissions inventory of toxic air contaminants, and a modeling effort to characterize risk across the SCAB.

Diesel Particulate Matter Incentive Programs in the Community

Goods Movement Emission Reduction Projects (Prop. 1B Program)

Prop. 1B Program provides funding for projects that reduce emissions from goods movement operations. Emissions from diesel equipment, locomotives and vehicles involved in goods movement greatly impact the health of communities located near ports, rail yards, distribution centers and roads with high truck traffic. The Prop. 1B Program is intended to reduce diesel air pollution from goods movement operations and achieve the earliest possible health risk reduction in nearby communities.

South Gate, Huntington Park, Florence-Firestone, Walnut Park

[Voucher Incentive Program \(VIP\)](#)

The VIP is a streamlined approach to reduce emissions by replacing old, high-polluting vehicles with newer, lower-emission vehicles. This program is limited to owners/operators with fleets of 10 or fewer vehicles that have been operating at least 75% (mileage-based) in California during the previous 24 months. The goal of this program is to reduce emissions from in-use heavy-duty trucks in small fleets by replacing Engine Model Years 2009 and older with Engine Model Years 2013 (or newer) emissions compliant models.

[Carl Moyer Program \(CMP\)](#)

The purpose of the CMP is to obtain emission reductions of NOx, PM10 and Reactive Organic Gases (ROG) from heavy-duty vehicles and other equipment operating in California as early and as cost-effectively as possible. The CMP provides financial incentives to assist in the purchase of cleaner-than-required engine and equipment technologies to achieve emission reductions that are real, surplus, quantifiable and enforceable.

[Clean School Buses](#)

Under this program SCAQMD provides substantial incentives to public school districts to purchase new very clean natural gas buses and low-emitting diesel buses. SCAQMD has provided further incentives to both school districts and private operators to install particulate trap filters that eliminate 85 percent or more of particulates in diesel exhaust. As of 2016, SCAQMD has awarded nearly \$300 million to replace nearly 1,600 pre-1994 school buses with clean alternative school buses having the latest safety features. Overall, as a result of these awards, about 4,900 school buses are currently operating that meet stringent air quality standards. At about 60 to 70 kids being transported per bus, this translates to nearly 300,000 kids traveling daily in some of the cleanest school buses in the country, the vast majority of them in EJ areas. The SCAQMD program is, thus, the largest of its kind in the country.

Previous Emissions Reduction Plans

Anadite Incorporated is a plating and polishing facility subject to AB 2588 located at 10647 Garfield Avenue South Gate, CA 90280. As part of the AB 2588 program requirements, a Health Risk Assessment was performed in 1998, and the facility was required to implement a Risk Reduction Plan, which was approved in 2000 and implemented subsequently. The main risk drivers were hexavalent chromium and nickel.

Florence-Firestone Community Plan: The Florence-Firestone Community Plan is a policy initiative prepared by the County of Los Angeles in collaboration with other regional agencies, including SCAQMD, to guide the future development, conservation and maintenance of the Florence-Firestone community. SCAQMD has been collaborating with the county to help protect the health, safety, and well-being of community members by providing resources to address the disproportionate pollution burden caused by industry and freeways near residential areas and schools.



Appendix B

Outreach Materials



Assembly Bill 617 (AB 617) **South Coast Air Quality Management District**

In an effort to solicit public input from community members and stakeholders, SCAQMD staff generated specialized outreach materials that helped inform the general public about AB 617. Appendix B contains the materials used to disseminate information through traditional media platforms, social media, and grassroots efforts. All printed materials and most electronic materials were provided to the public in English and Spanish. Translation services were also available at most meetings. The outreach materials are listed below.

- Image 1 – Outreach Flyer (English)
- Image 2 – Outreach Flyer (Spanish)
- Image 3 and 4 – Outreach Flyer (English and Spanish)
- Image 5 – Social Media Graphic for Santa Ana (English)
- Image 6 – Social Media Graphic for Santa Ana (Spanish)
- Image 7 – Social Media Graphic for Jurupa Valley (English)
- Image 8 – Social Media Graphic for Jurupa Valley (Spanish)
- Image 9 – Social Media Graphic for South Gate (English)
- Image 10 – Social Media Graphic for South Gate (Spanish)
- Image 11 – Social Media Graphic for Colton (English)
- Image 12 – Social Media Graphic for Colton (Spanish)
- Image 13 – Social Media Graphic for San Fernando (English)
- Image 14 – Social Media Graphic for San Fernando (Spanish)
- Image 15 – Flyer for Technical Meeting
- Image 16 – Social Media Image for Technical Meeting
- Image 17 and 18 – AB 617 Infographic (English and Spanish)
- Image 19 and 20 – Community Self Recommendation Form
- Image 21 – AB 617 Webpage
- Image 22 – Interactive Map

Image 1 & 2 – Outreach Flyer (English and Spanish)



South Coast Air Quality Management District
REUNION COMUNITARIA

El Distrito de Administración de la Calidad del Aire de la Costa Sur (SCAQMD por sus siglas en inglés) le invita a asistir a esta reunión pública para que conozca lo que se está llevando a cabo y lo que se hará en el futuro. En esta reunión se ofrecerá un resumen de cómo dos nuevas leyes del estado van a reducir la contaminación del aire en nuestra región:

- La Ley de California o Assembly Bill (AB) 134 es una ley que proporciona fondos para reemplazar vehículos antiguos de carga pesada, equipamiento, así como otras fuentes de diésel en nuestra región por tecnologías más nuevas y limpias.
- La Ley de California o Assembly Bill (AB) 617 es una nueva medida extraordinaria que brindará oportunidades para colaborar con comunidades de pocos recursos con el fin de mejorar la calidad del aire en las áreas que más lo necesitan. La reunión incluirá un comentario público, y se dará oportunidad de hacer de preguntas a la comunidad.

¡Le animamos a que venga!

Jueves, 22 de febrero, 2018


6:00 p.m.
Ciudad de Commerce – Council Chambers
2535 Commerce Way
Commerce, CA 90040
 Habrá traducción simultánea.
Reunión

Martes, 13 de Marzo del 2018 6:00 PM – 8:00 PM Wilmington Senior Center 1371 Eubank Ave., Wilmington, CA 90744
Martes, 10 de Abril del 2018 6:00 PM – 8:00 PM San Manuel Gateway College – Loma Linda University 250 S. G Street, San Bernardino, CA 92410

Para más información, visite nuestra página web www.aqmd.gov o contacte a nuestra asesora pública de SCAQMD por teléfono (909) 396-2432 o por correo electrónico publicadvisor@aqmd.gov.

SCAQMD es la agencia que controla la contaminación del aire en Los Angeles, Riverside y San Bernardino.

South Coast Air Quality Management District
 21885 Copley Drive, Diamond Bar, CA 91785-4178
aqmd.gov • 1-800-CUT-5M0G



South Coast Air Quality Management District
COMMUNITY MEETING

The South Coast Air Quality Management District (SCAQMD) invites you to attend this public meeting to learn about its current and future efforts. This meeting will provide a summary of how two new laws will reduce air pollution in our region:

- Assembly Bill (AB) 134 provides funding to replace older heavy-duty vehicles, equipment, and other diesel sources in our region with new, cleaner technologies.
- AB 617 is a new exciting effort which will bring opportunities to collaborate with disadvantaged communities to improve air quality in areas that need it the most. The meeting will include a public comment, question and answer portion for the community.

We encourage you to come!

Thursday, February 22, 2018
6:00 p.m. to 8:00 p.m.
City of Commerce – Council Chambers
2535 Commerce Way,
Commerce, CA 90040

Spanish translation will be provided

Upcoming Meetings

Tuesday, March 13, 2018 6:00 PM – 8:00 PM Wilmington Senior Center 1371 Eubank Ave., Wilmington, CA 90744	Tuesday, March 27, 2018 6:00 PM – 8:00 PM Riverside County Administration Center 4080 Lemon St., Riverside, CA 92501
Tuesday, April 10, 2018 6:00 PM – 8:00 PM San Manuel Gateway College – Loma Linda University 250 S. G Street, San Bernardino, CA 92410	Tuesday, April 17, 2018 6:00 PM – 8:00 PM Brookhurst Community Center 2271 W. Crescent Ave., Anaheim, CA 92801


For more information, please visit our website at www.aqmd.gov or contact Fabian Wesson, SCAQMD Public Advisor, at (909) 396-2432 or by email at publicadvisor@aqmd.gov.

SCAQMD is the air pollution control agency for all of Orange County and the urban portions of Los Angeles, Riverside and San Bernardino counties.

South Coast Air Quality Management District
 21885 Copley Drive, Diamond Bar, CA 91785-4178
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Stay Connected With Us @SouthCoastAQMD

Image 3 & 4 – Outreach Flyer (English and Spanish)



South Coast Air Quality Management District

Junta Comunitaria

Ley de la Asamblea 617 (AB 617)

Una Nueva Oportunidad Para Comunidades de Bajos Recursos, Impactadas Por la Contaminación del Aire

Acompañe al Distrito de Administración de la Calidad del Aire de la Costa Sur (SCAQMD) para aprender acerca de la ley de la Asamblea de California 617 (AB 617), la cual es una nueva oportunidad para mejorar la calidad del aire en comunidades de pocos recursos más afectadas por la contaminación del aire. SCAQMD está llevando a cabo juntas comunitarias para recibir sus sugerencias sobre cómo priorizar comunidades en nuestra región para futuros programas de monitoreo de aire y de reducción de emisiones. Participantes tendrán la oportunidad de compartir sus ideas y proveer comentarios. Se ofrecerá traducción al español en cada junta.

Próxima Junta


Miércoles, 30 de Mayo 2018 • 6:00 PM – 8:00 PM
Madison Elementary School
1124 Hobart St., Santa Ana, CA 92707

<p>Condado Los Angeles Miércoles, 13 de Junio, 2018 6:00 PM – 8:00 PM Parque South Gate 4900 Southern Ave., South Gate, CA 90280</p>	<p>Condado de Los Angeles Jueves, 21 de Junio, 2018</p>
<p>Condado de Riverside Miércoles, 6 de Junio, 2018 6:00 PM – 8:00 PM Distrito Escolar Unificado de Jurupa Valley 4850 Pedley Rd., Jurupa Valley, CA 92509</p>	

Para más información, por favor visite nuestra página con Fabian Wesson, asesora pública de SCAQMD electrónico publicado

SCAQMD es la agencia que controla la contaminación por las porciones urbanas de los condados de Los Angeles, Riverside, y San Bernardino.

South Coast Air Quality Management District • 21865 Copley Drive, Diamond Bar, CA 91765 • aqmd.gov • 1-800-CUT-SMOG



South Coast Air Quality Management District

Community Meeting

Assembly Bill 617 (AB 617)

A New Opportunity for Disadvantaged Communities Impacted by Air Pollution

Join the South Coast Air Quality Management District (SCAQMD) to learn about Assembly Bill 617 (AB 617), a new opportunity to improve air quality in disadvantaged communities most burdened by air pollution. SCAQMD is conducting public meetings to seek input on how to prioritize communities in our region for future air monitoring and emission reduction programs.

Attendees will have an opportunity to discuss ideas and provide public comment. Spanish interpretation will be offered at each meeting.

Upcoming Meeting

Wednesday, May 30, 2018 • 6:00 PM – 8:00 PM
Madison Elementary School
1124 Hobart St., Santa Ana, CA 92707

<p>Los Angeles County Wednesday, June 13, 2018 6:00 PM – 8:00 PM South Gate Park 4900 Southern Ave., South Gate, CA 90280</p>	<p>Los Angeles County Thursday, June 21, 2018 6:00 PM – 8:00 PM Las Palmas Park 505 S. Huntington St., San Fernando, CA 91340</p>
<p>Riverside County Wednesday, June 6, 2018 6:00 PM – 8:00 PM Jurupa Valley Unified School District 4850 Pedley Rd., Jurupa Valley, CA 92509</p>	<p>San Bernardino County Tuesday, June 19, 2018 6:00 PM – 8:00 PM Lawrence Hutton Community Center 660 Colton Ave., Colton, CA 92324</p>

For more information, please visit our website at www.aqmd.gov/AB617 or contact Fabian Wesson, SCAQMD Public Advisor, at (909) 396-2432 or at publicadvisor@aqmd.gov

SCAQMD is the air pollution control agency for all of Orange County and the urban portions of Los Angeles, Riverside, and San Bernardino Counties.

South Coast Air Quality Management District • 21865 Copley Drive, Diamond Bar, CA 91765 • aqmd.gov • 1-800-CUT-SMOG

Stay Connected With Us @SouthCoastAQMD




Image 5 & 6 – Social Media Graphic for Santa Ana (English and Spanish)



Image 7 & 8 – Social Media Graphic for Jurupa Valley (English and Spanish)



Image 9 & 10 – Social Media Graphic for South Gate (English and Spanish)

South Coast Air Quality Management District
Community Meeting
Assembly Bill 617 (AB 617)
A New Opportunity for Disadvantaged Communities Impacted by Air Pollution
June 13, 2018
6:00 PM – 8:00 PM
South Gate Park
4900 Southern Ave., South Gate, CA 90280
SCAQMD is conducting public meetings to seek input on how to prioritize communities for AB 617 air monitoring and emission reduction programs. Spanish interpretation will be offered.
For more information, please visit our website at www.aqmd.gov/AB617, call (909) 396-2432 or email publicadvisor@aqmd.gov

South Coast Air Quality Management District
Junta Comunitaria
Ley de la Asamblea 617 (AB 617)
Una Nueva Oportunidad Para Comunidades de Bajos Recursos, Impactadas Por la Contaminación del Aire
13 de Junio, 2018
6:00 PM – 8:00 PM
South Gate Park
4900 Southern Ave., South Gate, CA 90280
SCAQMD esta llevando a cabo juntas comunitarias, para recibir sus sugerencias sobre como priorizar comunidades para futuros programas de monitoreo de aire y de reducción de emisiones. Se ofrecerá traducción al español.
Para mas información, por favor visite nuestra pagina de web www.aqmd.gov/AB617, llame al (909) 396-2432 o mande un correo electrónico a publicadvisor@aqmd.gov

Image 11 & 12 – Social Media Graphic for Colton (English and Spanish)

South Coast Air Quality Management District
Community Meeting
Assembly Bill 617 (AB 617)
A New Opportunity for Disadvantaged Communities Impacted by Air Pollution
June 19, 2018
6:00 PM – 8:00 PM
Lawrence Hutton Community Center
660 Colton Ave., Colton, CA 92324
SCAQMD is conducting public meetings to seek input on how to prioritize communities for AB 617 air monitoring and emission reduction programs. Spanish interpretation will be offered.
For more information, please visit our website at www.aqmd.gov/AB617, call (909) 396-2432 or email publicadvisor@aqmd.gov


South Coast Air Quality Management District
Junta Comunitaria
Ley de la Asamblea 617 (AB 617)
Una Nueva Oportunidad Para Comunidades de Bajos Recursos, Impactadas Por la Contaminación del Aire
19 de Junio, 2018
6:00 PM – 8:00 PM
Centro Comunitario Lawrence Hutton
660 Colton Ave., Colton, CA 92324
SCAQMD esta llevando a cabo juntas comunitarias, para recibir sus sugerencias sobre como priorizar comunidades para futuros programas de monitoreo de aire y de reducción de emisiones. Se ofrecerá traducción al español.
Para mas información, por favor visite nuestra pagina de web www.aqmd.gov/AB617, llame al (909) 396-2432 o mande un correo electrónico a publicadvisor@aqmd.gov

Image 13 & 14 – Social Media Graphic for San Fernando (English and Spanish)

South Coast Air Quality Management District
Community Meeting
Assembly Bill 617 (AB 617)
*A New Opportunity for Disadvantaged
Communities Impacted by Air Pollution*
June 21, 2018
6:00 PM – 8:00 PM
Las Palmas Park
505 S. Huntington St., San Fernando, CA 91340
SCAQMD is conducting public meetings to seek input on how to prioritize communities for AB 617 air monitoring and emission reduction programs. Spanish interpretation will be offered.
For more information, please visit our website at www.aqmd.gov/AB617, call (909) 396-2432 or email publicadvisor@aqmd.gov

South Coast Air Quality Management District
Junta Comunitaria
Ley de la Asamblea 617 (AB 617)
*Una Nueva Oportunidad Para Comunidades de Bajos
Recursos, Impactadas Por la Contaminación del Aire*
21 de Junio, 2018
6:00 PM – 8:00 PM
Parque Las Palmas
505 S. Huntington St., San Fernando, CA 91340
SCAQMD esta llevando a cabo juntas comunitarias, para recibir sus sugerencias sobre como priorizar comunidades para futuros programas de monitoreo de aire y de reducción de emisiones. Se ofrecerá traducción al español.
Para mas información, por favor visite nuestra pagina de web www.aqmd.gov/AB617. llame al (909) 396-2432 o mande un correo electrónico a publicadvisor@aqmd.gov

Image 15 – Flyer for Technical Meeting



South Coast Air Quality Management District

Technical Workshop

Assembly Bill 617 (AB 617)

A New Opportunity for Disadvantaged Communities Impacted by Air Pollution

The South Coast Air Quality Management District (SCAQMD) is implementing Assembly Bill 617 (AB 617), a new opportunity to improve air quality in disadvantaged communities most burdened by air pollution. SCAQMD is conducting a technical workshop to describe the data and methodology used to prioritize communities for air monitoring and emission reduction programs through AB 617.

Attendees will have an opportunity to provide input and ask questions about SCAQMD's technical approach in creating the list of prioritized communities.

Friday, June 8, 2018
2:00 PM – 4:00 PM
Room GB

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

For more information, please visit our website at www.aqmd.gov/AB617 or contact Fabian Wesson, SCAQMD Public Advisor, at (909) 396-2432 or at publicadvisor@aqmd.gov

SCAQMD is the air pollution control agency for all of Orange County and the urban portions of Los Angeles, Riverside, and San Bernardino Counties.

South Coast Air Quality Management District • 21865 Copley Drive, Diamond Bar, CA 91765 • aqmd.gov • 1-800-CUT-SMOG

Stay Connected With Us @SouthCoastAQMD





Image 16 – Social Media Image for Technical Meeting

South Coast Air Quality Management District

Technical Workshop

Assembly Bill 617 (AB 617)

*A New Opportunity for Disadvantaged
Communities Impacted by Air Pollution*

June 8, 2018 • 2:00 PM – 4:00 PM
Room GB

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

SCAQMD will conduct a technical workshop to describe the data & methodology used to prioritize communities for air monitoring and emission reduction programs through AB 617. Attendees will have an opportunity to provide input and ask questions.


For more information, please visit our website at www.aqmd.gov/AB617, call (909) 396-2432 or email publicadvisor@aqmd.gov

Image 17 & 18 - AB 617 Infographic (English and Spanish)

AB 617

Ley de la Asamblea

Una nueva Oportunidad para Comunidades impactadas por la Contaminación del Aire



Metas clave

- Inversiones en Tecnología Limpia
- Desarrollo de Colaboraciones Locales
- Centradas en la Comunidad
- Aire Limpio
- Aumento de Transparencia


Enfoque a medida

- Aporte de la Comunidad
- Información Disponible

AB 617

Asamblea Bill

A new Opportunity for Communities impacted by Air Pollution



Key Goals

- Clean Technology Investments
- Develop Local Partnerships
- Air Monitoring
- Cleaner Air
- Enhanced Transparency
- Easier Access to Information

Community Centered

Tailored Approach

```




graph TD
    A[Community Input] --> C[Community Selection]
    B[Available Information] --> C
    C --> D[Community Air Monitoring]
    C --> E[Community Emissions Reduction Plan]
    D <--> E
    E --> F[Cleaner Air]
            
```

Provide Input

on the Community Selection Process & Recommend your Community

- Step 1: Visit www.aqmd.gov/ab617
- Step 2: Fill out the web form
- Step 3: Submit your response

South Coast Air Quality Management District




 @SouthCoastAQMD • www.aqmd.gov

909-396-3314 • ab617@aqmd.gov

Image 19 & 20 – Community Self Recommendation Form Page 1 and 2

11. What are the air pollution concern(s) in your community? Select all that apply:

<input type="checkbox"/> Light-duty traffic (cars and vans)	<input type="checkbox"/> Dust
<input type="checkbox"/> Heavy-duty traffic (trucks)	<input type="checkbox"/> Odor
<input type="checkbox"/> Goods movement	<input type="checkbox"/> Other. Please specify: _____
<input type="checkbox"/> Freeways	
<input type="checkbox"/> Power plants	
<input type="checkbox"/> Rail yards	
<input type="checkbox"/> Marine port	
<input type="checkbox"/> Airport	
<input type="checkbox"/> Oil and gas facilities	
<input type="checkbox"/> Warehouses	
<input type="checkbox"/> Auto-body shops	
<input type="checkbox"/> Waste incinerators	
<input type="checkbox"/> Chemical plants	
<input type="checkbox"/> Metal processing facilities	
<input type="checkbox"/> Agricultural processes	

12. If known, please provide information on the name and location of specific sources of air pollution on the community:

Additional Information
13. What is the best way for us to get your input?

- Email
- Website
- Social Media
- City Governments
- Other. Please specify: _____

14. Would you like to sign up for updates on A list:
- Yes
- No

Page



AB 617 Community Self-Recommendation Form
Please send us the completed form

By email: ab617@aqmd.gov or By mail:
 Attn: AB 617 forms
 21865 Copley Dr.
 Diamond Bar, CA 91765

Note: Information provided by you on this worksheet (including contact or other personal information) is a public record and may be released in response to a California Public Records Act request

1. Date: _____
- Contact Information**
2. First and Last Name: _____
3. Phone: _____
4. Email: _____
5. Organization (if applicable): _____

Input on Community Selection and Priorities

6. What types of information should we consider for selecting and prioritizing communities for AB 617?
- _____

Community Information

7. Provide a brief description of your community:
- _____
8. Community Name (as known by community members): _____
9. Community Location
 Street(s), City or Cities and Zip Code(s): _____
10. Is your community recommending itself for deployment of a community air monitoring campaign, for development of a community emissions reduction program, or both?
- Community air monitoring
- Community emissions reduction program
- Both

Image 21 – AB 617 Webpage

Language F.I.N.D. About Contact Grants & Bids Online Services I'm Looking For Search aqmd.gov

South Coast AQMD

AIR QUALITY RULES & COMPLIANCE INCENTIVES & PROGRAMS PERMITS NEWS, AGENDAS, & WEBCASTS TECHNOLOGY ADVANCEMENT RESOURCES

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Home / About / Initiatives / Environmental Justice / AB 617 & AB 134

SCAQMD Efforts Related to AB 617 and AB 134

The South Coast Air Quality Management District is actively conducting exciting and comprehensive community-based efforts that focus on improving air quality and public health in environmental justice communities.

Background

Assembly Member Cristina Garcia authored [Assembly Bill 617](#) to address the disproportionate impacts of air pollution in environmental justice communities. The measure requires local air districts to take specific actions to reduce air pollution and toxic air contaminants from commercial and industrial sources.

Previously passed bills provide significant new funding and resources to expand SCAQMD's community-based programs to reduce air pollution and protect public health, with a focus on environmental justice communities. For example, the state Legislature also adopted AB 134 to fund community air quality projects, specifically clean vehicle and ports investments.

The primary purpose of these new efforts is to implement AB 617. SCAQMD will conduct extensive outreach to residents and other stakeholders to describe the program and seek input on how to implement it.

Image 22 – Interactive Map

AB 617 Community Screening Tool - For Discussion Purposes

1 Using available information to guide AB 617 efforts

Why are we showing these maps?
Assembly Bill 617 (AB 617) requires the **California Air Resources Board (CARB)**, in consultation with the air districts, to select communities for the deployment of community air monitoring systems and/or preparation of community emissions reduction programs. The bill specifies that the highest priority areas shall be disadvantaged communities with high cumulative exposure burden for criteria pollutants and toxic air contaminants.

The following maps are some of the available data sources that can help the **South Coast Air**

2 MATES IV Top 25% (76th to 100th Percentile)

3 CalEnviroScreen 3.0 Top 25% (76th to 100th Percentile)

4 MATES IV and CalEnviroScreen 3.0 Top 25% (76th to 100th Percentile)

5 MATES IV Top 5% (96th to 100th Percentile)

6 CalEnviroScreen 3.0 Top 5% (96th to 100th Percentile)

7 MATES IV and CalEnviroScreen 3.0 Top 5% (96th to 100th Percentile)

LEGEND
 SCAQMD Boundary
 Boundary

Esri, HERE, Garmin, NGA, USGS, NPS | SCAQMD

Image 23 & 24 – Frequently Asked Questions (English and Spanish)

 <h3>Información sobre el Proceso de Identificación de Comunidades de la Ley de la Asamblea (AB) 617</h3> <p>1. ¿Qué es la Ley de la Asamblea (AB) 617?</p> <p>AB 617 es una nueva ley que se enfoca en reducir la exposición a la contaminación del aire en comunidades desfavorecidas. Esta ley brinda una gran oportunidad que el Distrito de Gestión de la Calidad del Aire de la Costa Sur (SCAQMD), en colaboración con la Junta de Recursos del Aire de California (CARB), utilizará para resolver los problemas de calidad del aire en la comunidad.</p> <p>2. ¿Cómo se define una comunidad?</p> <p>La nueva ley no tiene una definición, pero podría variar según la comunidad. Se juntará la información sobre la comunidad y se hará un estudio de caso para definir las comunidades. Se cuenta con varios factores como la proximidad a fuentes de contaminación, así como las asociaciones comuniantarias.</p> <p>3. ¿Cuántas comunidades se seleccionarán?</p> <p>El número de comunidades a ser seleccionadas en todo el estado de California será determinado por el personal de SCAQMD que creará un programa de recomendación comunitaria de la ley en www.aqmd.gov/AB617.</p> <p>4. ¿Cómo puede recomendar una comunidad?</p> <p>Si desea recomendar a su comunidad para el programa de AB 617, puede hacer una recomendación comunitaria de la ley en www.aqmd.gov/AB617.</p> <p>5. ¿Cómo puede darnos su opinión sobre el proceso?</p> <p>Las comunidades conocen mejor sus preocupaciones locales sobre la contaminación del aire y las posibles acciones para mejorar la calidad del aire. Su experiencia directa es fundamental para entender las necesidades de la comunidad.</p> <p>para la implementación de los requisitos de AB 617. Envíe sus respuestas y cualquier comentario adicional a ab617@aqmd.gov.</p> <p>8. ¿Cómo se seleccionarán las comunidades?</p> <p>La identificación de las comunidades más impactadas se basará en muchos factores que incluyen, entre otros:</p> <p>a) Factores técnicos que caracterizan la exposición acumulativa a la contaminación del aire en comunidades desfavorecidas.</p>	
 <h3>FAQ on Assembly Bill (AB) 617 Community Identification Process</h3> <p>1. What is Assembly Bill (AB) 617?</p> <p>AB 617 is a new law that focuses on reducing exposure to harmful air pollution in disadvantaged communities. This law provides an exciting opportunity for the South Coast Air Quality Management District (SCAQMD) to further address community air quality issues in collaboration with the California Air Resources Board (CARB).</p> <p>2. How is a community defined?</p> <p>The new law does not provide a definition, so it could vary by community. SCAQMD staff will use available air pollution information and community input to define communities according to a variety of potential factors, including existing community identity, political boundaries, common air pollution sources and concerns, and community partnerships.</p> <p>3. How many communities will be selected?</p> <p>The number of communities is yet to be determined and will likely be phased in over many years. It will depend on the air quality issues and resources available. CARB expects that there could be more than one hundred of communities selected throughout the state in the years to come. SCAQMD staff believes that as many as half of those communities will be located within our area.</p> <p>4. How can you self-recommend your community?</p> <p>If you would like to self-recommend your community to be considered for AB 617, please fill out the AB 617 Community Self Recommendation Form on our website at www.aqmd.gov/AB617.</p> <p>5. How can you provide feedback on this process?</p> <p>Communities have first-hand knowledge of local air quality concerns, emission sources, communicating data to residents, and potential actions to improve air quality. This direct experience is critical for understanding community needs and developing</p>	<p>recommendations for implementation of AB 617 requirements. Please send your responses and any additional comments to ab617@aqmd.gov.</p> <p>6. How will communities be selected?</p> <p>Identification of the most heavily burdened communities will be based on many factors including, but not limited to:</p> <p>a) Technical factors that characterize cumulative exposure to air pollution within disadvantaged communities:</p> <ul style="list-style-type: none">• Measured concentrations of air pollutants, and air quality modeling results;• Numbers of sensitive receptors (schools, daycare centers, hospitals) exposed to pollution;• Number of and proximity to emission sources;• Cancer risk estimates from SCAQMD's Multiple Air Toxics Exposure Study (MATES); and• Socio-economic factors such as poverty levels, unemployment rates, and linguistic isolation...etc. <p>b) Public input is a critical element for community identification and prioritization. As such, SCAQMD staff is seeking community self-recommendations (<i>question 5</i>).</p> <p>In addition to the technical information and public input, SCAQMD will consider other factors, including but not limited to:</p> <ul style="list-style-type: none">• Past or current community monitoring and/or emission reduction programs;• Local administrative and technical resources; and• Community interest and preparation, participation, and partnerships. <p>Once all the information has been gathered, SCAQMD staff will prepare a list of communities that will be prioritized in terms of the needs of the community and available resources. This list will be considered by SCAQMD's Governing Board and then provided to the California Air Resources Board (CARB) for final approval.</p>



Attachment 2

**Presentation to
SCAQMD Governing Board
July 6, 2018**

RECOMMEND COMMUNITIES AND INITIAL
IMPLEMENTATION SCHEDULE FOR
ASSEMBLY BILL 617

Governing Board Meeting

July 6, 2018

FIVE MAIN AB 617 ELEMENTS

Community
Air
Monitoring

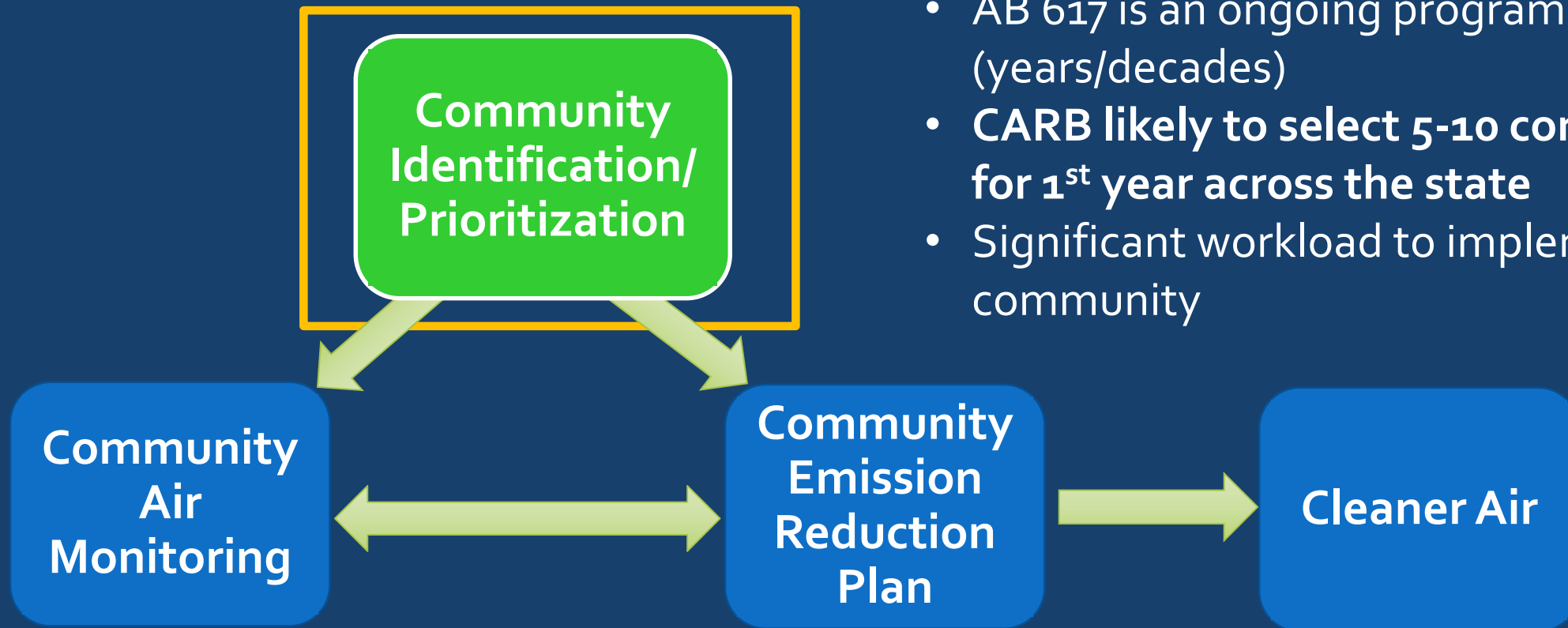
Community
Emission
Reduction
Plan

Best
Emission
Controls

Easier
Access to
Emissions
Data

Clean
Technology
Investments

COMMUNITY IDENTIFICATION & PRIORITIZATION FOR AB 617



- AB 617 is an ongoing program (years/decades)
- **CARB likely to select 5-10 communities for 1st year across the state**
- Significant workload to implement in each community

PROCESS

- **April-May, 2018** – Presented preliminary list at Stationary Source Committee and Board Retreat
- **April 30, 2018** – Provided preliminary list of communities to CARB
- **June 15, 2018** – Present recommendations to Stationary Source Committee
- **July 6, 2018** – Seek approval from Governing Board
- **July 31, 2018** – Provide final recommendations for Year 1 communities to CARB
- **September 27-28, 2018** - CARB Board considers statewide strategy

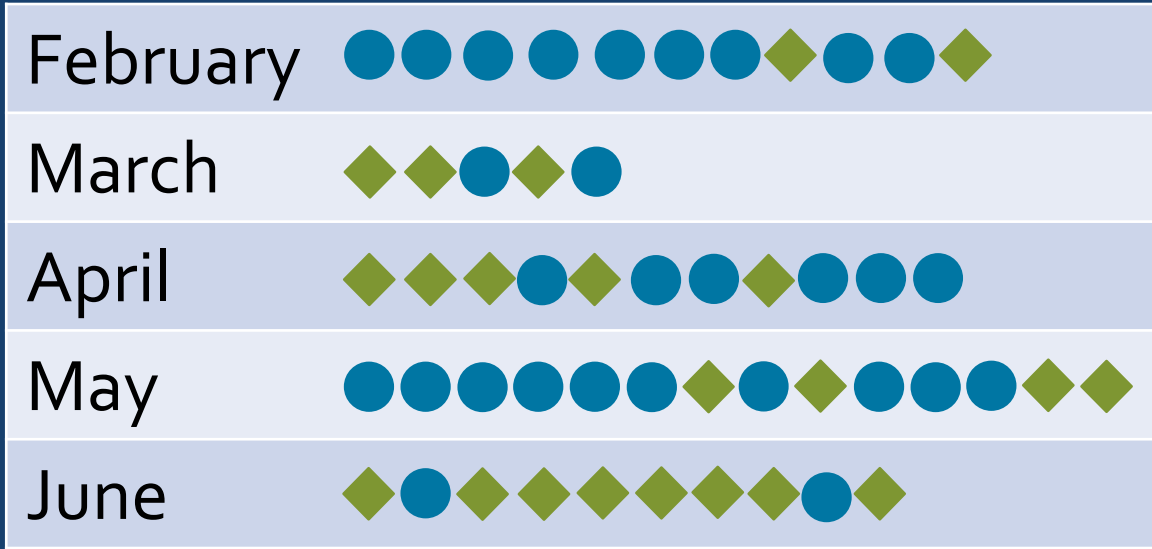
OUTREACH – MEETINGS & PRESENTATIONS

Completed through 6/27/2018:

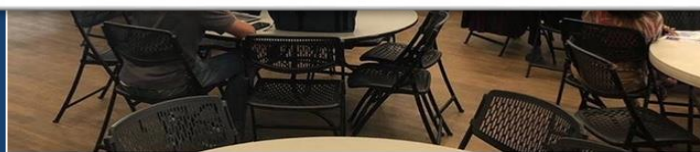
- **10** SCAQMD Community Meetings
 - Commerce, Wilmington, Riverside, San Bernardino, Anaheim, Santa Ana, Jurupa Valley, South Gate, Colton, San Fernando
- **1** Technical Workshop
- **2** SCAQMD EJCP meetings (Indio, Irvine)
- **9** Community Meetings hosted by other organizations and elected officials
- **25** Government agency meetings, workshops, advisory groups, staff briefings
- **1** Media interview
- **3** Academic presentations

● During work hours

◆ Evenings and weekends



AB 617 Community Meetings



KEY INPUT RECEIVED : PRIORITY FACTORS FOR COMMUNITY IDENTIFICATION & PRIORITIZATION

Air pollution sources

Diesel sources (freeways, trucks, warehouses, railyards)

Oil production & processing (wells, refineries)

Landfills, scrap yards, hazardous waste sites

Proximity/land use factors

Schools near air pollution sources/ industrial areas

Concentration of industries

Green spaces

Population factors

Population density

Low income

Communities of color

Access to healthcare

Asthma, cancer rates

Education levels

Children & elderly

COMMUNITY WAS SUPPORTIVE OF USING THESE TECHNICAL TOOLS TO INFORM COMMUNITY PRIORITIZATION

Multiple Air Toxics Exposure Study (MATES) IV - SCAQMD

- Regional **air toxics** study
- Air toxics **cancer risk**
- **Diesel** particulate matter accounts for 2/3 of risk
- **Multiple pollution sources**

Schools Near Freeways and Industrial Areas

- **Schools and day care centers** with **industrial zones** or **freeways** within 1000 feet.

CalEnviroScreen 3.0 - OEHHA

Pollution factors (**Multiple pollution sources**):

- Ozone, PM_{2.5}, **Diesel PM**
- Drinking water contaminants
- Pesticide use, toxic releases, traffic density
- Cleanup sites, groundwater threats, **hazardous waste** generators and facilities, impaired water bodies, **solid waste** sites and facilities

Population factors:

- **Asthma**, heart disease, low birth weight
- **Educational attainment, housing burden, linguistic isolation, poverty, unemployment**

SYSTEMATIC APPROACH FOR COMMUNITY PRIORITIZATION, SELECTION OF YEAR 1 COMMUNITIES

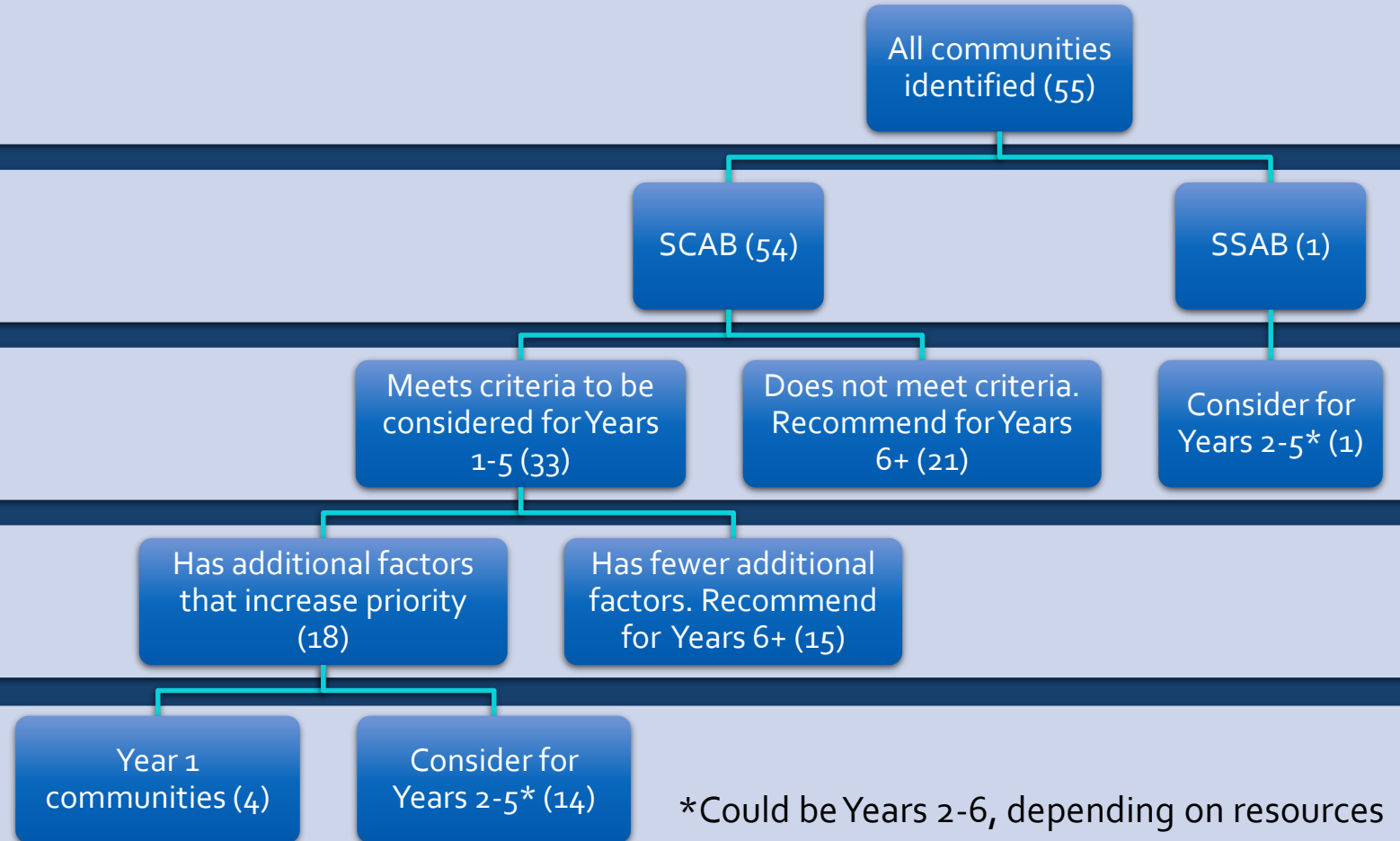
STEP 1: All communities in consideration for AB 617

STEP 2: Separate by air basin

STEP 3: Apply screening criteria

STEP 4: Evaluate additional factors

STEP 5: Consider selection criteria for Year 1 communities



*Could be Years 2-6, depending on resources

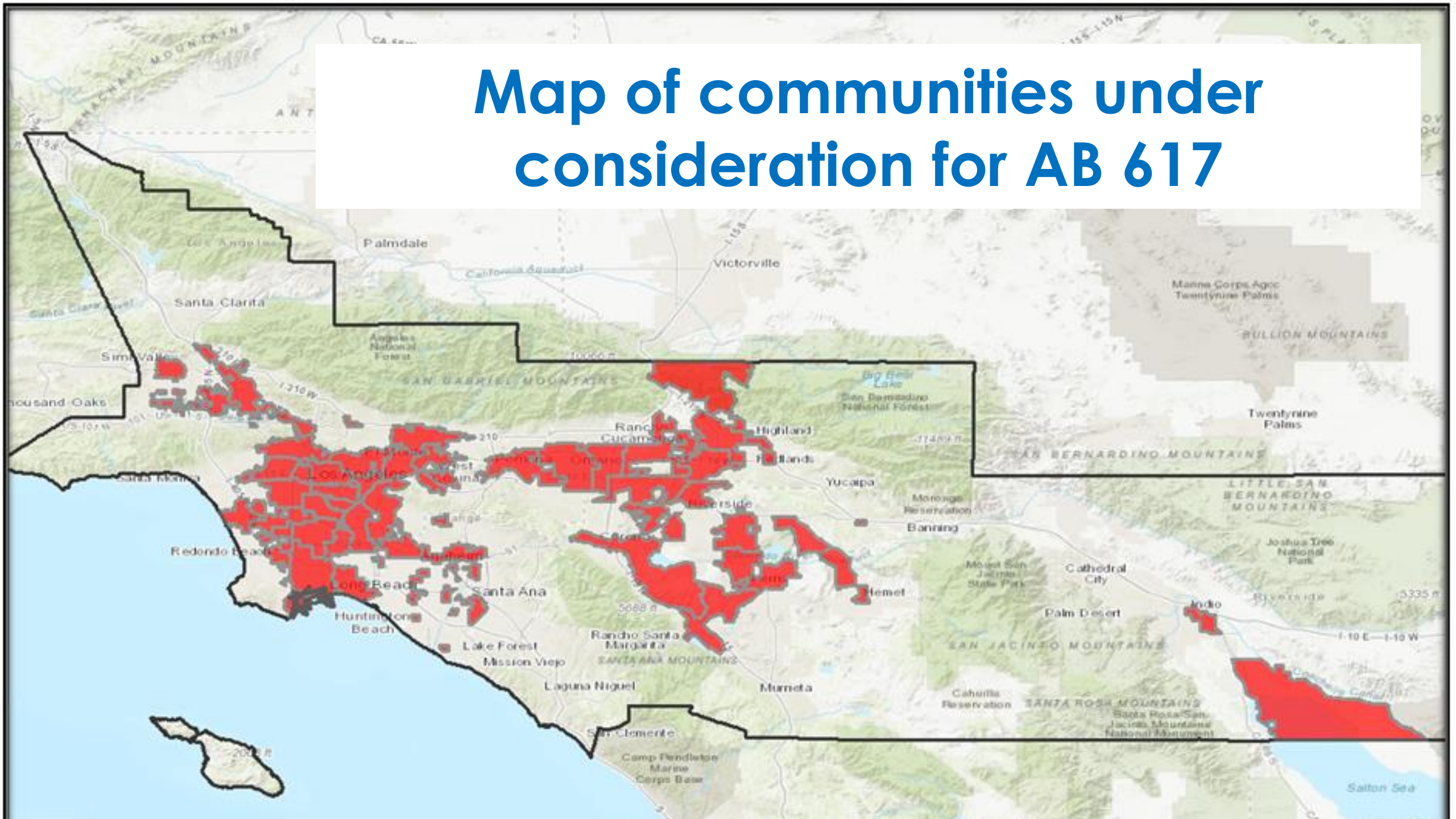
STEP 1: METHODS AND CRITERIA FOR COMMUNITY IDENTIFICATION

We first identified communities using a broadly inclusive approach.

Preliminary list includes at least one of the following:

- (1) Top 25% of MATES IV air toxics cancer risk
- (2) Top 25% of CalEnviroScreen 3.0 score
- (3) Community nominations
- (4) Communities with high density of schools near industrial zones

Map of communities under consideration for AB 617

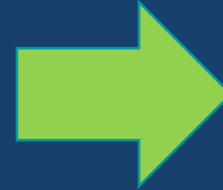


STEP 2: SEPARATE BY AIR BASIN

STEP 3: APPLY SCREENING CRITERIA

For SCAB communities (54 communities)

- CalEnviroScreen score in Top 5%, AND
- MATES IV air toxics cancer risk in Top 50%



33 communities
meet both criteria

For SSAB community (Indio/Eastern Coachella Valley)

- Several monitoring efforts just getting started
- Recommend that AB 617 efforts are best applied in Years 2-5 (or Years 2-6, depending on resources)

STEP 4: EVALUATE ADDITIONAL FACTORS



Communities with many schools near industrial areas or freeways



Past or current air monitoring study findings



Past or current community plans or programs



Broad-based community support (e.g. self-nominations)

STEP 4: EVALUATE ADDITIONAL FACTORS – CRITERIA (AMONG THE 33 SCAB COMMUNITIES THAT MET THE SCREENING CRITERIA)

Additional Factors:

- (A) Self-nomination received
- (B) Past or current air monitoring study findings
- (C) Past or current community plans
- (D) High ranking school proximity

Additional Factors	Initial Recommendation	Number of communities
Two or more additional factors	Consider for Years 1-5 or 1-6	10
Only self-nomination received	Consider for Years 1-5 or 1-6	8
Zero or one additional factor (not self-nomination)	Year 6+	15

STEP 5: CONSIDER SELECTION CRITERIA FOR YEAR 1 COMMUNITIES (AMONG 17 SCAB COMMUNITIES)

Given the short time frames and uncertain resources, staff is recommending communities for Year 1 that have a “head start”.



Communities where existing or past community air monitoring or community plans pave the way for rapid AB 617 plan implementation



Resources from local agencies and organizations that would contribute to the rapid implementation of this program



Consider geographic diversity and diverse air pollution issues

RECOMMENDATIONS AND RATIONALE FOR YEAR 1 COMMUNITIES

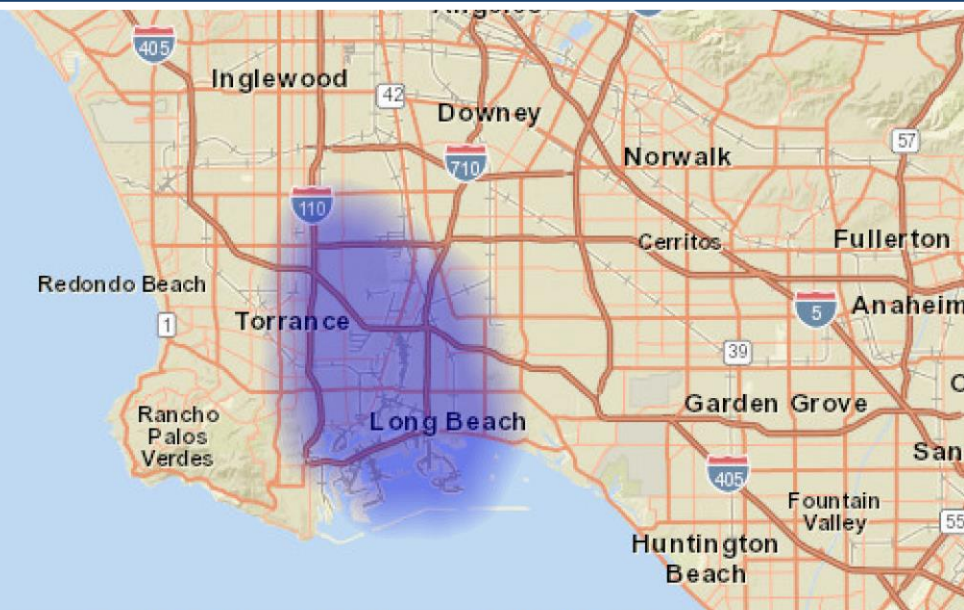
Community	Rationale
Wilmington, West Long Beach, Carson	Build upon MATES V monitoring efforts
East Los Angeles, Boyle Heights	Build upon Clean Communities Plan partnerships to address additional issues
San Bernardino, Muscoy	
South Gate / Huntington Park / Florence – Firestone / Walnut Park *	Industrial area proximity and MATES V monitoring

*As funding resources allow



WILMINGTON, WEST LONG BEACH, CARSON

- Port area communities, with several major refineries
- Socioeconomic burdens
- Previous and future air monitoring: Fluxsense pilot study, 710 study, MATES V Advanced Monitoring, Rule 1180 monitoring
- MATES IV: 100th percentile
- CalEnviroScreen 3.0: 98.8th percentile
- Nominations received from Cities of Carson and Los Angeles, and Communities for a Better Environment



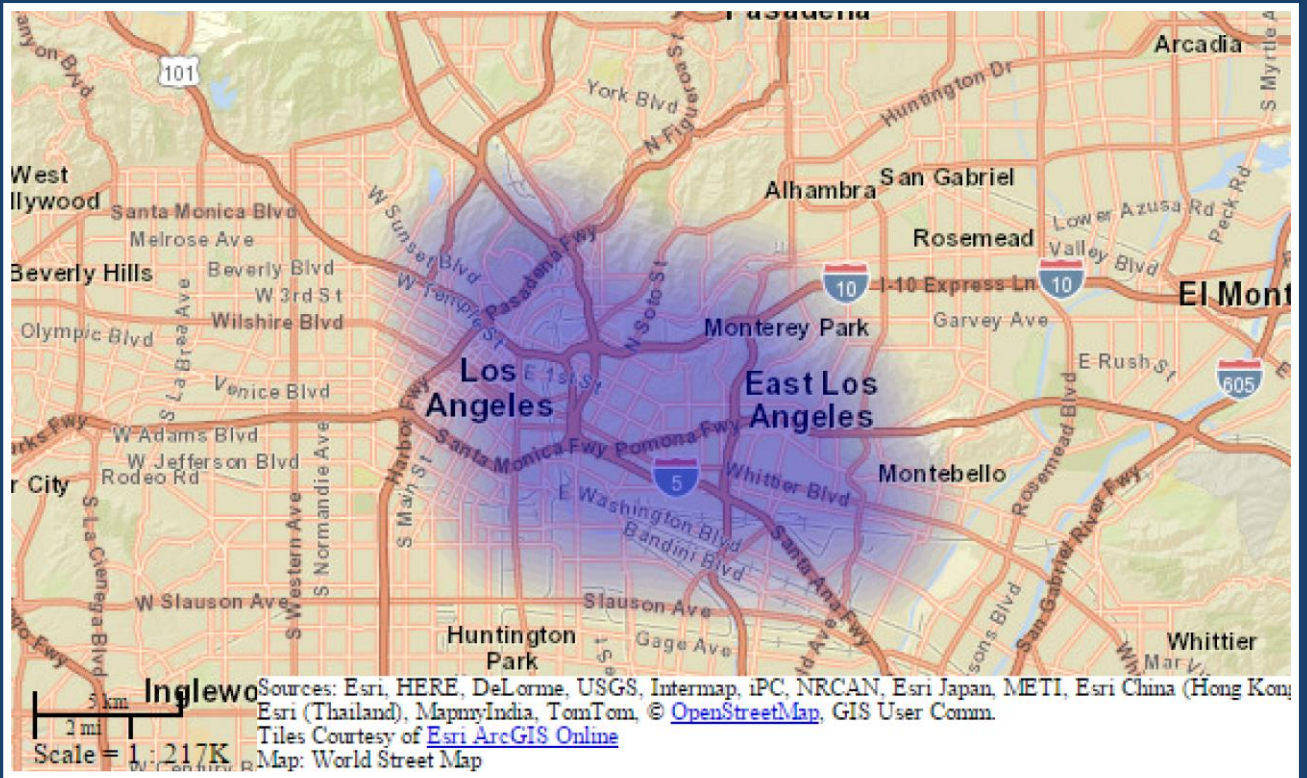
10 km
5 mi
Scale = 1 : 433K

Sources: Esri, HERE, DeLorme, USGS, Intermap, iPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, TomTom, © OpenStreetMap, GIS User Comm.
Tiles Courtesy of [Esri ArcGIS Online](#)
Map: World Street Map

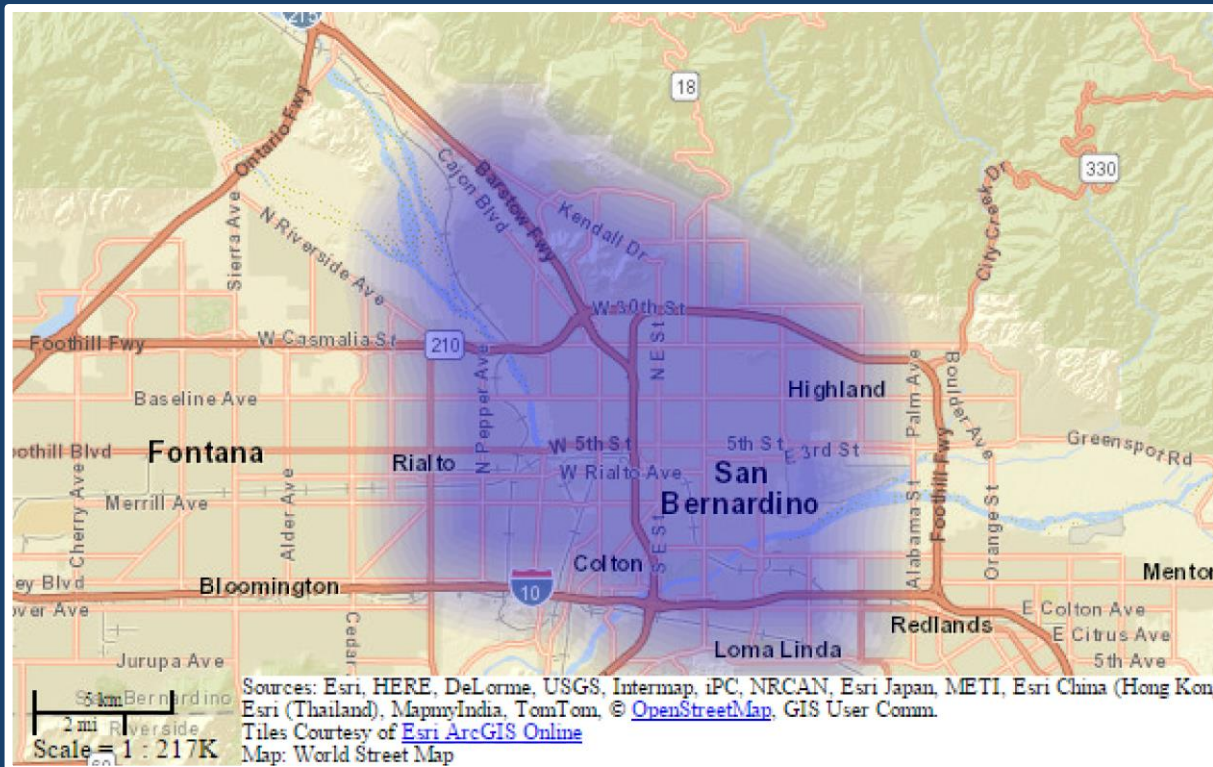


EAST LOS ANGELES, BOYLE HEIGHTS

- East LA communities, near freeways, rail yards, and major industrial areas
- Socioeconomic burdens
- Clean Communities Plan
- Previous air toxics monitoring
- MATES IV: 99.4th percentile
- CalEnviroScreen 3.0: 99.9th percentile
- Nominations received from community members

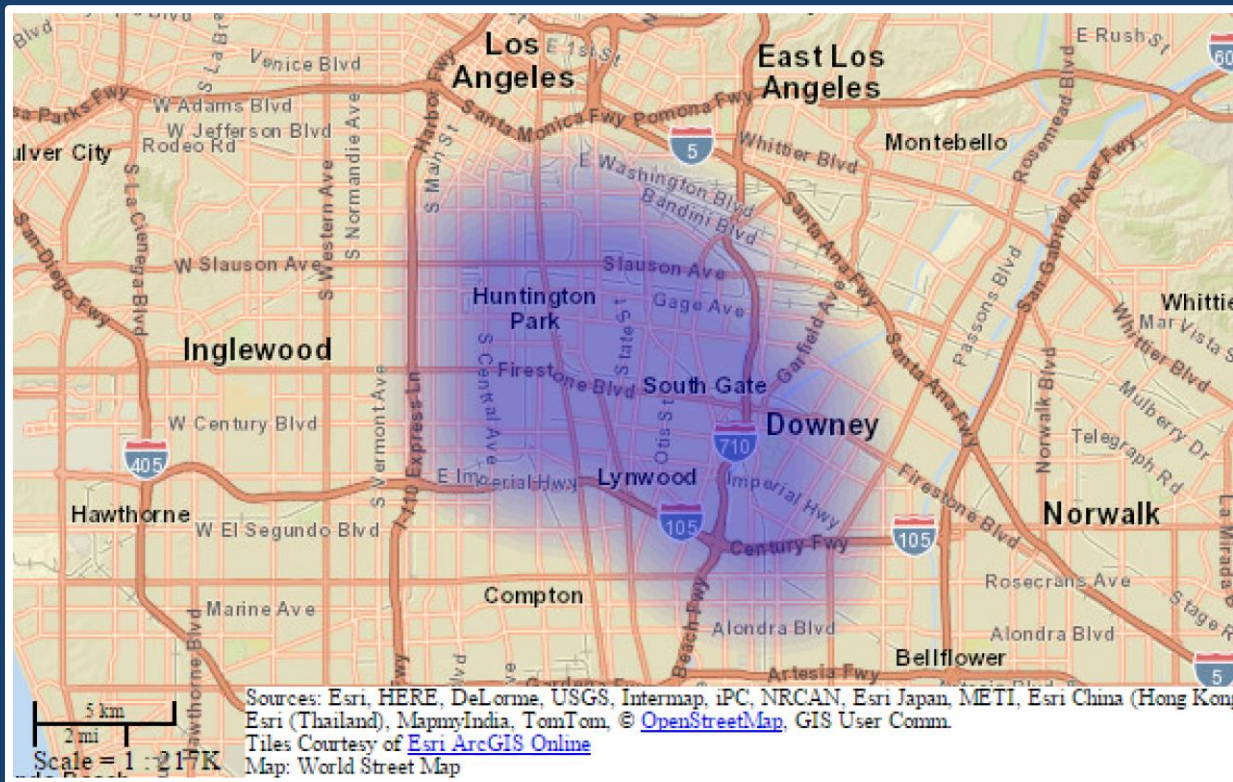


SAN BERNARDINO, MUSCOY



- Inland Empire community, with a major rail yard, and other industrial sources
- Socioeconomic burdens
- Clean Communities Plan
- MATES IV local-scale monitoring
- Geographical diversity, and diversity of sources
- MATES IV: 51.3th percentile
- CalEnviroScreen 3.0: 99.7th percentile
- Nominations received from elected official and Center for Community Action and Environmental Justice

SOUTH GATE / HUNTINGTON PARK / FLORENCE – FIRESTONE / WALNUT PARK *



- Alameda Corridor communities with major industrial areas near homes and schools
- SCAQMD participated in LA County Public Health's Community Risk Reduction Initiative
- MATES IV: 98.3th percentile
- CalEnviroScreen 3.0: 99.7th percentile
- School proximity score in highest category
- Nomination received from Communities for a Better Environment

*As funding resources allow

RECOMMENDATIONS & NEXT STEPS

- Seeking Board approval of staff recommendations to send to CARB by July 31st with the revised / expanded technical report
- Sept 2018 – CARB considers statewide strategy

BOARD MEETING DATE: July 6, 2018

AGENDA NO. 26

PROPOSAL: Determine that Proposed Amendments to Rule 1111 – Reduction of NOx Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces are Exempt from CEQA and Amend Rule 1111

SYNOPSIS: At the Public Hearing to adopt amendments to Rule 1111 on March 2, 2018, the Board directed staff to propose additional labeling requirements to better inform consumers when a unit is subject to a mitigation fee. Based on feedback from stakeholders as well as comments from Board members, staff is recommending provisions that will require furnace manufacturers to notify consumers on all consumer brochures, technical specification sheets, and the manufacturer's website that the unit is subject to a mitigation fee and is not eligible for the Clean Air Furnace Rebate Program.

COMMITTEE: Stationary Source, April 20 and May 18, 2018, Reviewed

RECOMMENDED ACTIONS:

Adopt the attached Resolution:

1. Determining that the proposed amendments to Rule 1111 – Reduction of NOx Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces, are exempt from the requirements of the California Environmental Quality Act; and
2. Amending Rule 1111 – Reduction of NOx Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces.

Wayne Natri
Executive Officer

PMF:SN:TG:GQ:YZ

Background

Rule 1111 - Reduction of NOx Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces was adopted in December 1978 to reduce emissions of nitrogen oxides (NOx) from residential and commercial gas-fired fan-type space heating furnaces with a rated heat input capacity of less than 175,000 BTU per hour. The rule applies to manufacturers, distributors, sellers, and installers of such furnaces. Rule 1111 was

amended in 2009 to lower the NO_x emission limit from 40 to 14 ng/Joule (ng/J), and was again amended in 2014 to include a mitigation fee option where manufacturers can pay a per-unit fee in lieu of meeting the 14 ng/J limit. The rule was last amended in March 2018 to increase the mitigation fee and further extend the mitigation fee option, depending on the furnace type and heat input capacity, with no change to mobile home units.

In 2018, a rebate program was established to incentivize consumers to purchase and install 14 ng/J furnaces in the SCAQMD instead of the 40 ng/J units that are subject to a mitigation fee. The SCAQMD executed the contract with Electric & Gas Industries Association (EGIA) on May 4, 2018, for the rebate program. EGIA is currently working with furnace manufacturers, distributors, and contractors on consumer outreach programs, which focus on consumer points of sale.

At the March 2018 Public Hearing for the Rule 1111 amendment, the Board approved the proposed amendments and directed staff to return to the Board with a labeling requirement for units that are subject to the mitigation fee alternate compliance option. The objective is to better inform consumers that are purchasing a 40 ng/J furnace, that the furnace is subject to a mitigation fee and there are lower emitting furnaces (14 ng/J) commercially available and eligible for a consumer rebate.

Public Process

The proposed labeling requirements were discussed at the March 28, 2018 working group meeting. The proposal was also discussed on April 13, 2018 at a Public Consultation meeting.

Proposed Amendments

Based on comments from stakeholders and some Board members at Stationary Source Committee meetings, staff is not recommending to modify the existing labeling requirements for furnaces or shipping containers. Effective October 1, 2018, Proposed Amended Rule 1111 will require manufacturers with furnaces that are utilizing the mitigation fee alternative compliance option to clearly display on brochures, technical specification sheets, and the manufacturers' websites that, "If installed in SCAQMD only: This furnace does not meet the SCAQMD Rule 1111 NO_x emission limit (14 ng/J), and thus is subject to a mitigation fee of up to \$450. This furnace is not eligible for the Clean Air Furnace Rebate Program: www.CleanAirFurnaceRebate.com."

Key Issues

Based on stakeholder comments, Proposed Amended Rule 1111 has been modified to remove requirements to add additional language to existing labeling on the furnace and its shipping container. With this revision, staff is not aware of any key remaining issues.

California Environmental Quality Act

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 amendments to Rule 1111 pursuant to: 1) CEQA Guidelines Section 15002(k) – General Concepts, the three-step process for deciding which document to prepare for a project subject to CEQA; and 2) CEQA Guidelines Section 15061 – Review for Exemption, procedures for determining if a project is exempt from CEQA. SCAQMD staff has determined that it can be seen with certainty that there is no possibility that the proposed amendments to Rule 1111 may have a significant adverse effect on the environment. Therefore, the project is considered to be exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Activities Covered by General Rule. A Notice of Exemption has been prepared pursuant to CEQA Guidelines Section 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 Impact Assessment

The proposed amendments to Rule 1111 add consumer notification requirements for informational materials, including marketing brochures, technical specification sheets, and manufacturers' websites, for furnaces that are not certified to meet the 14 ng/J NOx limit and are participating in the alternate compliance option. The proposed amendments are administrative in nature and cost impacts to manufacturers are expected to be minimal; as such there are no significant adverse socioeconomic impacts. The proposed amendments do not require that the manufacturers generate additional brochures or specification sheets. Instead, the requirement is to add information to brochures, technical specification sheets, and their website, which they already create, maintain, and distribute. In addition, the proposed amendments do not significantly affect air quality and emission limitations, and therefore, no Socioeconomic Impact Assessment is required under California Health and Safety Codes Sections 40440.8 and 40728.5.

Resource Impacts

Existing staff resources are adequate to implement the proposed rule amendments.

Attachments

- A. Summary of Proposal
- B. Key Issues and Responses
- C. Rule Development Process
- D. Key Contacts List
- E. Resolution
- F. Proposed Amended Rule 1111
- G. Final Staff Report
- H. CEQA – Notice of Exemption
- I. Board Meeting Presentation

ATTACHMENT A
SUMMARY OF PROPOSAL

**Proposed Amended Rule 1111 – Reduction of NO_x Emissions From Natural-Gas-Fired,
Fan-Type Central Furnaces**

Summary of Proposed Amendment

Consumer Notification Requirement

- Applicable to manufacturers of any furnace that is for distribution or sale inside the District using an alternate compliance option in lieu of meeting the 14 ng/J certification limit.
- Becomes effective on October 1, 2018. The manufacturer must only distribute or publish Informative Materials that clearly display the following language, or other language as approved no later than August 31, 2018 by the Executive Officer: “If installed in SCAQMD only: This furnace does not meet the SCAQMD Rule 1111 NO_x emission limit (14 ng/J), and thus is subject to a mitigation fee of up to \$450. This furnace is not eligible for the Clean Air Furnace Rebate Program: www.CleanAirFurnaceRebate.com.”

Informative Materials mean the following:

- The consumer brochure for the furnace;
- The technical specification sheet for the furnace; and
- The manufacturer’s website that promotes this furnace

ATTACHMENT B
KEY ISSUES AND RESPONSES

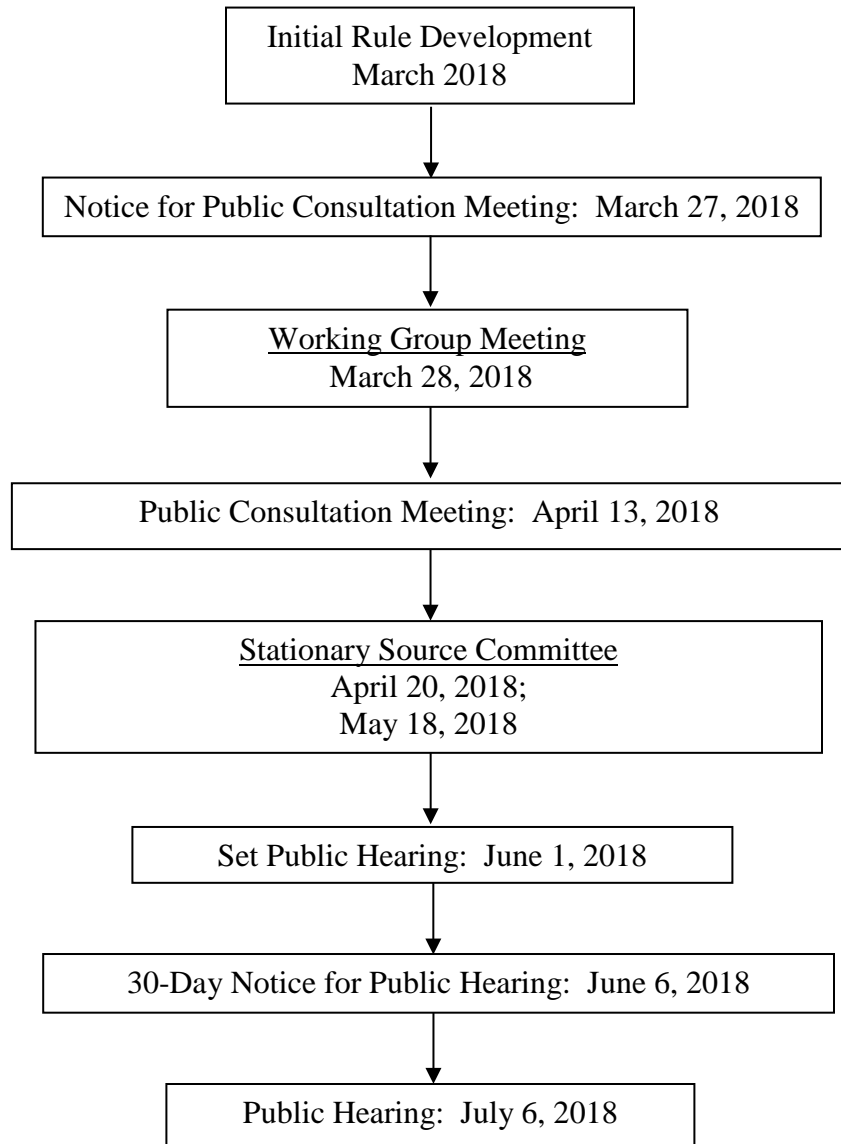
**Proposed Amended Rule 1111 – Reduction of NO_x Emissions From Natural-Gas-Fired,
Fan-Type Central Furnaces**

Staff is not aware of any key remaining issues.

ATTACHMENT C

RULE DEVELOPMENT PROCESS

Proposed Amended Rule 1111 – Reduction of NO_x Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces



Four (4) months spent in rule development

One (1) Working Group Meeting

One (1) Public Consultation Meeting

ATTACHMENT D
KEY CONTACTS LIST

Air Conditioning, Heating, and Refrigeration Institute (AHRI)

Air-Tro

Bard Manufacturing

Beckett Gas, Inc.

Bekaert Combustion Technology

Carrier Corporation

Gas Technology Institute (GTI)

Goodman Manufacturing Company

Heating, Air-conditioning & Refrigeration Distributors International (HARDI)

Howard Industries

Ingersoll Rand (Trane)

Johnson Controls

Lantec Products, Inc.

Lennox International Inc. (+Allied)

Nortek Global HVAC

Rheem Manufacturing

ATTACHMENT E

RESOLUTION NO.18_____

A Resolution of the SCAQMD Governing Board determining that Proposed Amended Rule 1111 - Reduction of NOx Emissions From Natural-Gas-Fired, Fan-Type Central Furnaces is exempt from the requirements of the California Environmental Quality Act (CEQA).

A Resolution of the South Coast Air Quality Management District (SCAQMD) Governing Board amending Rule 1111 - Reduction of NOx Emissions From Natural-Gas-Fired, Fan-Type Central Furnaces.

WHEREAS, the SCAQMD Governing Board finds and determines that Proposed Amended Rule 1111 is considered a “project” pursuant to CEQA per CEQA Guidelines Section 15002(k) – General Concepts, the three-step process for deciding which document to prepare for a project subject to CEQA; and

WHEREAS, the SCAQMD has had its regulatory program certified pursuant to Public Resources Code Section 21080.5 and CEQA Guidelines Section 15251(l), and has conducted a CEQA review and analysis of Proposed Amended Rule 1111 pursuant to such program (SCAQMD Rule 110); and

WHEREAS, the SCAQMD Governing Board finds and determines after conducting a review of the proposed project in accordance with CEQA Guidelines Section 15002(k) – General Concepts, the three-step process for deciding which document to prepare for a project subject to CEQA, and CEQA Guidelines Section 15061 – Review for Exemption, procedures for determining if a project is exempt from CEQA, that Proposed Amended Rule 1111 is 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 Proposed Amended Rule 1111 may have any significant adverse effects on the environment, and is therefore, exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Activities Covered by General Rule; and

WHEREAS, the SCAQMD staff has prepared a Notice of Exemption for Proposed Amended Rule 1111, that is completed in compliance with CEQA Guidelines Section 15062 – Notice of Exemption; and

WHEREAS, Proposed Amended Rule 1111 and supporting documentation, including but not limited to, the Notice of Exemption, the Final Staff Report, and the Socioeconomic Impact Assessment section of the Final Staff Report, were presented to the SCAQMD Governing Board and the SCAQMD Governing Board has reviewed and considered the entirety of this information, and has taken and considered staff testimony and public comment prior to approving the project; and

WHEREAS, modifications have been made to Proposed Amended Rule 1111 since notice of public hearing was published such that the Consumer Notification Requirement must now only appear on distributed or published Informative Materials, defined as consumer brochures, technical specification sheets, and the manufacturer's website for each furnace using the alternate compliance option, while no longer proposing to add this information to the furnace label and its shipping container; and

WHEREAS, the SCAQMD Governing Board finds and determines, taking into consideration the factors in Section (d)(4)(D) of the Governing Board Procedures (Section 30.5(4)(D)(i) of the Administrative Code), that the modifications made to Proposed Amended Rule 1111 since the notice of public hearing was published are not so substantial as to significantly affect the meaning of the Proposed Amended Rule within the meaning of Health and Safety Code Section 40726 because: (a) the changes do not impact emission reductions, (b) the changes do not affect the number or type of sources regulated by the rule, (c) the changes are consistent with, and accomplish the purpose of, the information but lessened requirements contained in the notice of public hearing, and (d) the consideration of the range of CEQA alternatives is not applicable because Proposed Amended Rule 1111 is exempt from CEQA; and

WHEREAS, 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 Final Staff Report; and

WHEREAS, the SCAQMD Governing Board has determined that a need exists to amend Rule 1111 to require manufacturers to inform consumers about the mitigation fee for non-compliant furnaces and the availability of a rebate program for compliant units; and

WHEREAS, the SCAQMD Governing Board obtains its authority to adopt, amend, or repeal rules and regulations from Sections 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 Proposed Amended Rule 1111 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 1111 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 1111 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 1111 references the following statutes which the SCAQMD hereby implements, interprets or makes specific: Health and Safety Code Sections 40001(a) (rules to meet air quality standards); 40440(a) (rules to carry out the plan); and 40702 (adoption of rules and regulations); and

WHEREAS, the SCAQMD Governing Board has determined that Proposed Amended Rule 1111 does not make an existing emission limit or standard more stringent, and therefore the requirements of Health and Safety Code Section 40727.2 are satisfied; and

WHEREAS, the SCAQMD Governing Board has determined that the Socioeconomic Impact Assessment section of the Final Staff Report of Proposed Amended Rule 1111, 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 1111 will not result in increased costs to the affected industries, as set forth in the Socioeconomic Impact Assessment section of the Final Staff Report; 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 specifies the Manager of Proposed Amended Rule 1111 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

WHEREAS, the SCAQMD Governing Board has determined that Proposed Amended Rule 1111 should be adopted for the reasons contained in the Final Staff Report; and

NOW, THEREFORE, BE IT RESOLVED, that the SCAQMD Governing Board does hereby determine, pursuant to the authority granted by law, that Proposed Amended Rule 1111 is exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Activities Covered by General Rule. This information was presented to the SCAQMD Governing Board, whose members reviewed, considered and approved the information therein prior to acting on Proposed Amended Rule 1111; and

BE IT FURTHER RESOLVED, that the SCAQMD Governing Board requests that Proposed Amended Rule 1111 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 1111 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 does hereby adopt, pursuant to the authority granted by law, Proposed Amended Rule 1111, as set forth in the Attachment F and incorporated herein by reference.

Dated: _____

Clerk of the Boards

ATTACHMENT F

(Adopted December 1, 1978)(Amended July 8, 1983)(Amended November 6, 2009)
(Amended September 5, 2014)(Amended March 2, 2018) (Proposed Amended Rule 1111
July 2018)

**PROPOSED AMENDED RULE 1111. **REDUCTION OF NO_x EMISSIONS
FROM NATURAL-GAS- FIRED, FAN-
TYPE CENTRAL FURNACES****

(a) Purpose and Applicability

The purpose of this rule is to reduce NO_x emissions from fan-type central furnaces, as defined in this rule. This rule applies to manufacturers, distributors, sellers, and installers of residential and commercial fan-type central furnaces, requiring either single-phase or three-phase electric supply, used for comfort heating with a rated heat input capacity of less than 175,000 BTU per hour, or, for combination heating and cooling units, a cooling rate of less than 65,000 BTU per hour.

(b) Definitions

- (1) ANNUAL FUEL UTILIZATION EFFICIENCY (AFUE) is defined in Section 10.1 of Code of Federal Regulations, Title 10, Part 430, Subpart B, Appendix N.
- (2) BTU means British thermal unit or units.
- (3) CONDENSING FURNACE means a high-efficiency furnace that uses a second heat exchanger to extract the latent heat in the flue gas by cooling the combustion gasses to near ambient temperature so that water vapor condenses in the heat exchanger, is collected and drained.
- (4) FAN-TYPE CENTRAL FURNACE is a self-contained space heater using natural gas, or any fan-type central furnace that is in natural gas-firing mode, providing for circulation of heated air at pressures other than atmospheric through ducts more than 10 inches in length that have:
 - (A) a RATED HEAT INPUT CAPACITY of less than 175,000 BTU per hour; or
 - (B) for combination heating and cooling units, a cooling rate of less than 65,000 BTU per hour.
- (5) HEAT INPUT means the higher heating value of the fuel to the furnace measured as BTU per hour.
- (6) NO_x EMISSIONS means the sum of nitrogen oxide and nitrogen dioxide (oxides of nitrogen) in the flue gas, collectively expressed as nitrogen dioxide.

- (7) RATED HEAT INPUT CAPACITY means the gross HEAT INPUT of the combustion device.
 - (8) 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.
 - (9) SINGLE FIRING RATE means the burners and control system are designed to operate at only one fuel input rate and the control system cycles burners between the maximum heat output and no heat output.
 - (10) USEFUL HEAT DELIVERED TO THE HEATED SPACE is the AFUE (expressed as a fraction) multiplied by the heat input.
 - (11) VARIABLE FIRING RATE means the burners and control system are designed to operate at more than one fuel input rate and the control system cycles burners between two or more heat output rates and no heat output.
 - (12) WEATHERIZED means designed for installation outside of a building, equipped with a protective jacket and integral venting, and labeled for outdoor installation.
- (c) Requirements
- (1) A manufacturer shall not, after January 1, 1984, manufacture or supply for sale or use in the South Coast Air Quality Management District fan-type central furnaces, unless such furnaces meet the requirements of paragraph (c)(3).
 - (2) A person shall not, after April 2, 1984, sell or offer for sale within the South Coast Air Quality Management District fan-type central furnaces unless such furnaces meet the requirements of paragraph (c)(3).
 - (3) Fan-type central furnaces shall:
 - (A) not emit more than 40 nanograms of oxides of nitrogen (calculated as NO₂) per joule of useful heat delivered to the heated space; and
 - (B) be certified in accordance with subdivision (d) of this rule.
 - (4) On or after October 1, 2012, a person shall not manufacture, supply, sell, offer for sale, or install, for use in the South Coast Air Quality Management District, fan-type central furnaces subject to this rule, unless such furnace

complies with the applicable emission limit and compliance date set forth in Table 1 and is certified in accordance with subdivision (d) of this rule.

Table 1 – Furnace NOx Limits and Compliance Schedule

Compliance Date	Equipment Category	NOx Emission Limit (nanograms/Joule *)
October 1, 2012	Mobile Home Furnace	40
April 1, 2015	Condensing Furnace	14
October 1, 2015	Non-condensing Furnace	14
October 1, 2016	Weatherized Furnace	14
October 1, 2018	Mobile Home Furnace	14

* Nanograms of oxides of nitrogen (calculated as NO₂) per joule of useful heat delivered to the heated space

- (5) Any manufacturer of fan-type central furnaces regulated by this rule may elect to pay a per unit mitigation fee in lieu of meeting the 14 nanogram/Joule NOx emission limit in Table 1 of paragraph (c)(4) of this rule, provided the manufacturer complies with the following requirements:
 - (A) Prior to the phase one mitigation fee start date specified in Table 2, pays a per unit mitigation fee of \$200 for each condensing furnace and \$150 for each other type of furnace distributed or sold into the SCAQMD, disregarding the furnace size.
 - (B) On and after the phase one mitigation fee start date but no later than the mitigation fee option end date specified in Table 2, pays a per unit phase one or phase two mitigation fee for each condensing, non-condensing, weatherized, or mobile home furnace according to Table 2.

Table 2 – Alternate Compliance Plan with the Phase One and Phase Two Mitigation Fee Schedules

Furnace		Phase One Mitigation Fee		Phase Two Mitigation Fee		Phase Two Mitigation Fee Option End Date
Size Range	Furnace Category	Phase One Mitigation Fee Start Date	Phase One Mitigation Fee (\$/Unit)	Phase Two Mitigation Fee Start Date	Phase Two Mitigation Fee (\$/Unit)	
≤ 60,000 BTU/hr	Condensing	May 1, 2018	\$275	October 1, 2018	\$350	September 30, 2019
	Non-condensing	October 1, 2018	\$225	April 1, 2019	\$300	September 30, 2019
	Weatherized	October 1, 2018	\$225	April 1, 2019	\$300	September 30, 2020
	Mobile Home	October 1, 2018	\$150	April 1, 2019	\$150	September 30, 2021
> 60,000 Btu/hr and ≤ 90,000 BTU/hr	Condensing	May 1, 2018	\$300	October 1, 2018	\$400	September 30, 2019
	Non-condensing	October 1, 2018	\$250	April 1, 2019	\$350	September 30, 2019
	Weatherized	October 1, 2018	\$250	April 1, 2019	\$350	September 30, 2020
	Mobile Home	October 1, 2018	\$150	April 1, 2019	\$150	September 30, 2021
> 90,000 BTU/hr	Condensing	May 1, 2018	\$325	October 1, 2018	\$450	September 30, 2019
	Non-condensing	October 1, 2018	\$275	April 1, 2019	\$400	September 30, 2019
	Weatherized	October 1, 2018	\$275	April 1, 2019	\$400	September 30, 2020
	Mobile Home	October 1, 2018	\$150	April 1, 2019	\$150	September 30, 2021

- (C) Submits an alternate compliance plan for each 12 month time period after the applicable Table 1 compliance date during which the manufacturer elects to pay the mitigation fee in lieu of meeting the NOx emission limit.
- (D) Submits to the SCAQMD an alternate compliance plan no later than 60 days prior to the applicable compliance date, or no later than March 16, 2018 for the condensing furnace compliance plan starting on April 1, 2018, which includes the following:
 - (i) a letter with the name of the manufacturer requesting the mitigation fee compliance option signed by a responsible official identifying the category of fan-type central furnaces

- and the 12 month alternate compliance period that the mitigation fees cover;
- (ii) an estimate of the quantity of applicable Rule 1111 fan-type central furnaces to be distributed or sold into the SCAQMD during the alternate compliance period, which estimate shall be based on total distribution and sales records or invoices of condensing, non-condensing, weatherized or mobile home fan-type central furnaces that were distributed or sold into the SCAQMD during the 12 month period of July 1 to June 30 prior to the applicable compliance date, along with supporting documentation;
 - (iii) a completed SCAQMD Form 400A with company name, identification that application is for an alternate compliance plan (section 7 of form), identification that the request is for the Rule 1111 mitigation fee compliance option (section 9 of form), and signature of the responsible official;
 - (iv) a check for payment of the alternate compliance plan filing fee (Rule 306, section (c)).
- (E) Submits to the Executive Officer a report signed by the responsible official for the manufacturer identifying by model number the quantity of Rule 1111 fan-type central furnaces actually distributed or sold into SCAQMD and a check for payment of mitigation fees for the applicable 12 month alternate compliance period for the quantity of applicable Rule 1111 fan-type central furnaces distributed or sold into the SCAQMD during the alternate compliance period. The report and the payment of mitigation fees must be submitted to the SCAQMD no later than thirty (30) days after the end of each 12-month mitigation fee alternate compliance period.
- (F) Notwithstanding the requirements set forth in subparagraph (c)(5)(E), during the phase one period specified in Table 2, submits a report signed by the responsible official for the manufacturer identifying by model number the quantity of Rule 1111 fan-type central furnaces actually distributed or sold into SCAQMD and a check for payment of mitigation fees for the phase one period no later than thirty (30) days after the end of the phase one period. The

12-month compliance plan payment as specified in subparagraph (c)(5)(E) that includes this phase one period shall be reconciled so as not to include the phase one payment.

- (G) For the last and remaining 6-month period of the condensing furnace final alternate compliance plan ending on September 30, 2019, specified in Table 2, submits a report signed by the responsible official for the manufacturer identifying by model number the quantity of Rule 1111 fan-type central furnaces - condensing furnaces actually distributed or sold into SCAQMD and a check for payment of mitigation fees to the SCAQMD no later than October 30, 2019.

(d) Certification

- (1) The manufacturer shall have each appliance model tested in accordance with the following:
 - (A) Oxides of nitrogen measurements, test equipment, and other required test procedures shall be in accordance with SCAQMD Method 100.1.
 - (B) Operation of the furnace shall be in accordance with the procedures specified in Section 4.0 of Code of Federal Regulations, Title 10, Part 430, Subpart B, Appendix N.
- (2) One of the two formulas shown below shall be used to determine the nanograms of oxides of nitrogen per joule of useful heat delivered to the heated space:

$$N = \frac{4.566 \times 10^4 \times P \times U}{H \times C \times E}, \qquad N = \frac{3.655 \times 10^{10} \times P}{(20.9 - Y) \times Z \times E}$$

Where:

- N = nanograms of emitted oxides of nitrogen per joule of useful heat.
- P = concentration (ppm volume) of oxides of nitrogen in flue gas as tested.
- U = volume percent CO₂ in water-free flue gas for stoichiometric combustion.
- H = gross heating value of fuel, BTU/cu.ft. (60°F, 30-in. Hg).

C = measured volume percent of CO₂ in water-free flue gas, assuming complete combustion and no CO present.

E = AFUE, percent (calculated using Table 2).

Y = volume percent of O₂ in flue gas.

Z = heating value of gas, joules/cu. meter (0.0°C, 1 ATM).

(3) Prior to the date a furnace model is first shipped to a location in the SCAQMD for use in the District, the manufacturer shall obtain Executive Officer’s approval for the emission test protocol and emission test results verifying compliance with the applicable NO_x limit specified in Table 1, submitting the following:

(A) A statement that the model is in compliance with subdivision (c). (The statement shall be signed by a responsible official and dated, and shall attest to the accuracy of all statements.)

(B) General Information

(i) Name and address of manufacturer.

(ii) Brand name.

(iii) Model number, as it appears on the furnace rating plate.

(C) A description of the furnace and specifications for each model being certified.

(e) Identification of Compliant Units

(1) The manufacturer of the furnace complying with subdivisions (c) and (d) shall display the following on the shipping container label and rating plate of the furnace:

(A) Model number;

(B) Heat input capacity;

(C) Applicable NO_x emission limit in Table 1; and

(D) Date of manufacture or date code.

(2) Any non-certified furnace shipped to a location in the South Coast Air Quality Management District for distribution or sale outside of the District shall have a label on the shipping container identifying the furnace as not certified for use in the District.

(3) Consumer Notification Requirement

(A) For the purposes of subparagraph (e)(3)(B), “Informative Materials” shall mean the following:

- (i) The consumer brochure for the furnace;
- (ii) The technical specification sheet for the furnace; and
- (iii) The manufacturer’s website that promotes, discusses, or lists the furnace.

(B) Effective October 1, 2018, for any furnace that is for distribution or sale inside of the South Coast Air Quality Management District that is using an alternate compliance plan in lieu of meeting the 14 ng/J certification limit, a manufacturer shall only distribute or publish Informative Materials that clearly display the following language: “~~For installation~~If installed in SCAQMD only: This furnace does not meet the SCAQMD Rule 1111 14 ng/J-NOx emission limit (14 ng/J), and thus is subject to a mitigation fee of up to \$450. This furnace is not eligible for the Clean Air Furnace Rebate Program: www.CleanAirFurnaceRebate.com.”

- (C) A manufacturer may use alternative language in lieu of subparagraph (e)(3)(B), provided the alternative language is:
- (i) Similar to the language in subparagraph (e)(3)(B);
 - (ii) Submitted to the Executive Officer by August 1, 2018; and
 - (iii) Approved by the Executive Officer no later than August 31, 2018.

The manufacturer shall use the language in subparagraph (e)(3)(B) if the alternative language is not approved.

(f) Enforcement

The Executive Officer may periodically conduct such tests as are deemed necessary to ensure compliance with subdivision (c), (d), and (e).

(g) Exemptions

- (1) The provisions of this rule shall not apply to furnaces installed in mobile homes before October 1, 2012.
- (2) For furnaces manufactured, purchased, and delivered to the South Coast Air Quality Management District prior to the applicable compliance date in Table 1, any person may, until 300 days after the applicable compliance date, sell, offer for sale, or install such a furnace in the District, so long as the furnace meets the requirements of paragraph (c)(3) and subdivisions (d) and (e).

- (3) For furnaces that have been encumbered in a contractual agreement, signed prior to January 1, 2018, by a furnace manufacturer or distributor for future or planned construction, the manufacturer shall be allowed to sell the units within the SCAQMD at the mitigation fee specified in subparagraph (c)(5)(A), provided:
- (A) An application for exemption is submitted to the Executive Officer prior to April 2, 2018;
 - (B) The total quantity of furnaces in application(s) by any one manufacturer does not exceed 15% of furnaces distributed and sold in the previous compliance plan period;
 - (C) Those furnaces are sold no later than their mitigation fee option end dates specified in Table 2; and
 - (D) The following documents and information are provided to the Executive Officer, including but not limited to:
 - (i) contractual agreement for the units sold or to be sold in the District;
 - (ii) quantity, model number, and serial number of the subject units;
 - (iii) contract execution date; and
 - (iv) name(s) of the contractor (s).
 - (E) Failure to comply with the requirements specified in subparagraphs (g)(3)(A) through (g)(3)(D) shall result in the requirement to paying or retroactively paying the corresponding mitigation fee specified in paragraph (c)(5) within 30 days upon notification from the Executive Officer.
- (4) The manufacturer of any natural gas furnace that is not certified to meet 14 ng/J of NO_x emission and is to be installed with a propane conversion kit for propane firing only in the SCAQMD, is exempt from subdivisions (c) and (d), provided:
- (A) Effective June 1, 2018, the shipping carton or the name plate of the furnace clearly displays: "This furnace is to be installed for propane firing only. Operating in natural gas mode is in violation of the SCAQMD Rule 1111."
 - (B) The following documents and information shall be provided to the Executive Officer, accompanying the compliance plan report

specified in subparagraphs (c)(5)(E), (c)(5)(F), and (c)(5)(G), including but not limited to:

- (i) The quantity of propane conversion kits for furnaces actually distributed or sold into SCAQMD for the applicable compliance plan period;
 - (ii) The quantity of propane conversion kits for furnaces distributed or sold into the SCAQMD during the 12 month period of July 1 to June 30 prior to the applicable compliance date; and
 - (iii) Photographic evidence of the required language set forth in section (g)(4)(a) as it appears on the carton or unit, including all versions utilized by the manufacturer, for approval by the Executive Officer. The photographs must be sufficient to verify the wording is correct and that it is “clearly visible,” taking into account the font type, size, color, and location on the carton or unit.
- (C) The manufacturer of this type of unit which has been installed in the SCAQMD without meeting above requirements shall be in violation of SCAQMD Rule 1111.

ATTACHMENT G

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Final Staff Report **Proposed Amended Rule 1111 – Reduction of NO_x Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces**

July 2018

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

Planning, Rule Development, and Area Sources
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**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
GOVERNING BOARD**

Chairman: WILLIAM A. BURKE, Ed.D.
Speaker of the Assembly Appointee

Vice Chairman: DR. CLARK E. PARKER, SR.
Senate Rules Committee Appointee

MEMBERS:

MARION ASHLEY
Supervisor, Fifth District
County of Riverside

BEN BENOIT
Mayor, Wildomar
Cities of Riverside County

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County of San Bernardino

HILDA L. SOLIS
Supervisor, First District
County of Los Angeles

EXECUTIVE OFFICER:

WAYNE NASTRI

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EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Rule 1111 reduces emissions of nitrogen oxides (NO_x) from residential and commercial gas-fired fan-type space heating furnaces with a rated heat input capacity of less than 175,000 BTU per hour or, for combination heating and cooling units, a cooling rate of less than 65,000 BTU per hour. The rule applies to manufacturers, distributors, sellers, and installers of such furnaces.

Rule 1111 was adopted by the SCAQMD Governing Board in December 1978 and amended in 1983, 2009, 2014, and March 2018. The more significant changes included: (1) the 2009 amendment lowering the NO_x emissions from 40 to 14 nanograms per Joule (ng/J); (2) the 2014 amendment providing an alternate compliance option that allows the original equipment manufacturers (OEMs) to pay a per unit mitigation fee of \$200 for each condensing furnace and \$150 for each other type of furnace, in lieu of meeting the new lower NO_x emission limit of 14 ng/J, for up to 36 months past the applicable compliance date; and (3) the March 2018 amendment extending the mitigation fee alternate compliance option by 1.5 years for condensing furnaces and one year for non-condensing and weatherized furnaces, and increasing the mitigation fee to a range of \$300 to \$450, depending on the furnace type and heat input capacity, with no fee change for mobile home units.

In 2018, staff also established a rebate program to incentivize consumers to purchase and install compliant 14 ng/J furnaces in the SCAQMD instead of the 40 ng/J units that are subject to a mitigation fee. The SCAQMD executed the contract with Electric & Gas Industries Association (EGIA) on May 4, 2018, for the rebate program. EGIA is currently working with furnace manufacturers, distributors, and contractors on consumer outreach programs, which focus on consumer points of sale.

At the March 2018 Public Hearing for the Rule 1111 amendment, the Governing Board approved the proposed amendments and directed staff to return to the Board with a labeling requirement for units that are subject to the mitigation fee alternate compliance option. The objective is to better inform consumers that when they are purchasing a 40 ng/J furnace, that furnace is subject to the mitigation fee, while there are other compliant furnaces (14 ng/J) that are commercially available and eligible for a consumer rebate.

Based on feedback from manufacturers, distributors, and contractors, as well as additional direction from members of the Governing Board, staff proposes to add a Consumer Notification Requirement for all informative materials made available for any furnace that is utilizing the mitigation fee alternate compliance option, instead of including the information on a label on the furnace and/or shipping container. This requirement will notify consumers on all consumer brochures, technical specification sheets, and the manufacturer's website that the unit is subject to a mitigation fee and is not eligible for the Clean Air Furnace Rebate Program.

CHAPTER 1: BACKGROUND

INTRODUCTION

REGULATORY HISTORY

EQUIPMENT AND PROCESS

REQUIREMENTS AND TESTS FOR NEW TECHNOLOGY

AFFECTED INDUSTRIES

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INTRODUCTION

The purpose of Rule 1111 – Reduction of NO_x Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces is to reduce NO_x emissions from residential and commercial gas-fired fan-type space heating furnaces with a rated heat input capacity of less than 175,000 BTU per hour or, for combination heating and cooling units, a cooling rate of less than 65,000 BTU per hour. The rule applies to manufacturers, distributors, sellers, and installers of such furnaces. It requires manufacturers to certify that each furnace model offered for sale in the SCAQMD complies with the emission limit using specific test methods approved by the SCAQMD and U.S. EPA. In lieu of meeting the lower emission limit, the current rule provides manufacturers an alternate compliance option of paying a per-unit mitigation fee for up to 3 to 4.5 years past the applicable compliance date, depending on the furnace type. Most single family homes, many multi-unit residences, and some small commercial buildings in the SCAQMD use this type of space heating equipment.

REGULATORY HISTORY

Rule 1111 was adopted by the SCAQMD Governing Board in December 1978, addressing all sizes of space heating furnaces. The original rule required all residential and commercial space heating furnaces to meet a NO_x emission limit of 40 nanograms per Joule (ng/J) of heat output (equivalent to 61 ppm at a reference level of 3% oxygen and 80% Annual Fuel Utilization Efficiency (AFUE)) beginning January 1, 1984. At the December 1978 rule adoption Hearing, a rule requirement that all space heating furnaces meet a 12 ng/J NO_x emission limit by 1995 was considered by the Governing Board but not adopted.

Rule 1111 was later amended in July 1983 in order to limit applicability based on a unit's size and to exempt larger commercial space heaters. The rule amendment limited applicability to furnaces with a heat input of less than 175,000 Btu per hour or, for combination heating and cooling units, a cooling rate of less than 65,000 Btu per hour. The July 1983 amendment also exempted units manufactured for use in mobile homes (manufactured housing), revised the definition of efficiency, and clarified testing procedures.

In November 2009, Rule 1111 was amended to be consistent with the objectives of the 2007 Air Quality Management Plan (AQMP) Control Measure CMB-03. The 2009 amendment established a new lower NO_x emission limit of 14 ng/J (equivalent to 22 ppm at a reference level of 3% oxygen and 80% AFUE), and required the three major categories of residential furnace – condensing (high efficiency), non-condensing (standard), and weatherized – to meet the new limit by October 1, 2014, October 1, 2015, and October 1, 2016, respectively. Furthermore, new mobile home heating units, which were unregulated prior to the 2009 amendment, had to meet a NO_x limit of 40 ng/J by October 1, 2012, with a future limit of 14 ng/J on October 1, 2018. The new lower NO_x emission limit of 14 ng/J reflects a 65% reduction from the then current limit of 40 ng/J. To facilitate the depletion of existing inventories and to ensure a smooth transition to the new limits, Rule 1111 also provided a temporary 10-month exemption (a sell-through period) for units manufactured and delivered into the SCAQMD prior to the compliance date.

To encourage and accelerate technology development, the 2009 Rule 1111 amendment provided an incentive for early compliance with the 14 ng/J NO_x emission limit, and a \$3 million fund was approved for this purpose. Manufacturers that delivered 14 ng/J furnaces into the SCAQMD prior to the applicable compliance date were given the opportunity to receive a payment of \$75 for each standard efficiency furnace and \$90 for each high-efficiency unit sold and delivered into the SCAQMD 90 days prior to the applicable compliance date. However, to date, no manufacturer has applied for this incentive.

The 2009 Rule 1111 amendment also required a technology assessment and status report to the Governing Board. This technology assessment evaluated both the feasibility of the new lower NO_x emission limit and the rule implementation schedule. The SCAQMD Technology Advancement Office (TAO) initiated a Request for Proposals (RFP) to develop prototype residential furnaces that meet the new 14 ng/J NO_x limit. The technology development projects were initiated in 2010 and completed in 2013. The total cost of the four projects was \$1,447,737 with \$447,737 provided by The Gas Company and \$50,000 provided by the San Joaquin Valley Unified Air Pollution Control District. The prototype furnaces developed through these four projects demonstrated that the new lower Rule 1111 NO_x limit is achievable in all of the types of forced air residential heating furnaces produced for the United States market. However, additional time may have been needed to commercialize 14 ng/J furnaces. This technology assessment was presented at the Governing Board meeting on January 10, 2014.

Rule 1111 was later amended in September 2014 to delay the compliance date for condensing furnaces and provide an alternate compliance option. The alternate compliance option allows manufacturers subject to Rule 1111 to pay a per unit mitigation fee of \$200 for each condensing furnace and \$150 for each other type of furnace distributed or sold into the SCAQMD, in lieu of meeting the new lower NO_x emission limit. The mitigation fee alternate compliance option can be used for up to 36 months past the applicable compliance date. Depending on furnace type, the mitigation fee option had an end date, and the NO_x limit of 14 ng/J was phased in, over the period from April 1, 2018, to October 1, 2021. Industry endorsed the mitigation fee approach. The 2014 amendment was State Implementation Plan (SIP)-approved in March 2016, with the mitigation fee used to offset foregone emissions reductions.

Rule 1111 was last amended in March 2018. Based on considerations of technology development and implementation status, stakeholders' input, and the need to encourage development and sale of compliant products, the following amendments were made to Rule 1111: (1) increasing the mitigation fee in two phases to a range of \$300 to \$450, depending on the furnace type and heat input capacity; (2) extending the mitigation fee alternate compliance option by 1.5 years for condensing furnaces, and one year for non-condensing and weatherized furnaces; (3) providing an exemption from the mitigation fee increase for units encumbered in a contractual agreement by OEMs and distributors for new construction, if contracts were signed prior to January 1, 2018; (4) providing an exemption of rule applicability for natural gas furnaces to be installed with propane conversion kits for propane firing only, with a defined labeling requirement; and (5) removing the ~~120~~120-day lead time requirement for certification application submittal.

In March 2018, staff also proposed to establish a rebate program for consumers who purchase and install compliant furnaces in the SCAQMD to benefit consumers and incentivize the purchase of lower emitting compliant furnaces. The SCAQMD executed the contract with Electric & Gas Industries Association (EGIA) on May 4, 2018, to administer the rebate program. Current funding for this rebate program includes the previously authorized \$3 million and the incremental increase of Rule 1111 mitigation fees in the March 2018 amendment, specified as \$500 per furnace for the first 6000 rebates, and \$300 per condensing furnace and \$200 per each other type of furnace thereafter. The SCAQMD will be closely monitoring the program with a “real-time” dashboard, and may seek additional funds or make other adjustments based on program performance. EGIA is anticipated to start receiving application in June 2018 for this Clean Air Furnace Rebate Program.

At the March 2018 Public Hearing for the Rule 1111 amendment, the Governing Board expressed concern that consumers should be informed that they are paying a fee for non-compliant furnaces sold in the marketplace and that there are compliant units commercially available that are eligible for money back through the rebate program. The Board directed staff to return to the Board adding a labeling requirement to the rule to address these concerns. At the May 2018 Stationary Source Committee Meeting and the June 2018 Governing Board Meeting, members of the Governing Board requested that the rule not require the manufacturers to label the furnace. Instead the rule should require notification language on any written materials specifying information about or advertising furnaces being sold pursuant to the alternate compliance option.

EQUIPMENT AND PROCESS

Fan-type gas-fired furnaces heat a building by circulating air from inside the building (office, home, apartment, etc.) through the furnace. In a fan-type furnace, air is heated when it passes through a heat exchanger. Combustion gases heat up the inside of the heat exchanger, and air from the building that is moving past the outside of the heat exchanger removes heat from the outside surface. A blower (fan) pulls air through one or more intake ducts and pushes the air past the heat exchanger and through another set of ducts, which direct the heated air to different parts of the building. The heated air circulates through the building before it is again pulled into the intake ducts and re-heated. This process continues until a specific temperature is detected by a thermostat in the building, which then shuts off the furnace. When the temperature at the thermostat goes below a set point, the thermostat sends a signal for the furnace to turn on.

REQUIREMENTS AND TESTS FOR NEW TECHNOLOGY

Gas furnaces in the United States must meet the ANSI Z21.47/CSA 2.3 standard referred to as CSA certification, mainly to ensure safety. To be sold and installed in the SCAQMD jurisdiction, they must also be certified by the SCAQMD for Rule 1111 NO_x emission limit compliance by specific test methods approved by the SCAQMD and U.S. EPA. OEMs may also participate in AHRI certification program for verification testing of output heating capacity and annual fuel utilization efficiency. As gas furnaces should be installed according to building

heating, ventilation, and air conditioning (HVAC) requirements, manufacturers have training programs for installers.

AFFECTED INDUSTRIES

Proposed Amended Rule 1111 affects manufacturers (NAICS 333), distributors and wholesalers (NAICS 423), and retailers and dealers (NAICS 444) of residential furnaces. Because heating units regulated by the rule are used in most residential and many commercial settings for heating small buildings, construction and building contractors and installers (NAICS 238 and 811) related to residential furnaces are also affected by PAR 1111. The Air Conditioning Heating and Refrigeration Institute (AHRI), the major manufacturer's trade organization, indicates that there are no manufacturers of fan-type gas-fired residential furnaces in the SCAQMD. However, these companies do maintain regional sales offices and distribution centers in the SCAQMD and there are manufacturers of other types of heating furnaces in the SCAQMD.

PUBLIC PROCESS

The proposed labeling or labeling requirements were discussed at the March 28, 2018, Working Group meeting. The proposal was also discussed at the April 13, 2018, Public Consultation, and the April 20, 2018 and May 18, 2018, Stationary Source Committee (SSC) meetings, as well as the June 1, 2018, Governing Board meeting. The Public Hearing for PAR 1111 is scheduled for July 6, 2018.

CHAPTER 2: SUMMARY OF PROPOSED AMENDED RULE 1111

PROPOSED AMENDMENTS TO RULE REQUIREMENTS

PROPOSED AMENDMENTS TO RULE REQUIREMENTS

In lieu of meeting the 14 ng/J NO_x emission limit, paragraph (c)(5) provides furnace manufacturers that are subject to Rule 1111 an option to pay a per unit mitigation fee for up to 3 to 4.5 years past the Table 1 compliance date, depending on the type of furnace. The SCAQMD Clean Air Furnace Rebate Program provides consumers an incentive to purchase and install furnaces that are certified to meet the 14 ng/J NO_x emission limit. The incentive is \$500 per furnace for the first 6000 rebates, and thereafter \$300 per condensing furnace and \$200 per other types. The consumer notification requirements are intended to inform the consumer market that non-compliant furnaces are subject to the mitigation fee, while compliant furnaces are commercially available and eligible for a consumer rebate.

Consumer Notification Requirements

At the March 2018 Board meeting to adopt amendments to extend and increase the mitigation fee option, the Board directed staff to add a labeling requirement to the Rule that would inform the consumers when they are purchasing a furnace that is subject to a mitigation fee. During the rule development process for the proposed amendments, manufacturers suggested that consumers could be more effectively informed of the mitigation fee and rebate program by including information in brochures and on their websites as most consumers do not see the unit prior to purchase, or even after installation (e.g., attic furnaces).

On this basis, staff proposes to add new paragraph (e)(3) to require, no later than October 1, 2018, that the manufacturer of any furnace that is using the alternate compliance option and paying a mitigation fee, because the unit is not certified to meet the 14 ng/J certification limit, include approved language in the consumer brochure and technical specification sheet for that furnace, as well as on the manufacturer's website. The notification language must read: "~~For installation~~If installed in SCAQMD only: This furnace does not meet the SCAQMD Rule 1111 14 ng/J-NO_x emission limit (14 ng/J), and thus is subject to a mitigation fee of up to \$450. This furnace is not eligible for the Clean Air Furnace Rebate Program: www.CleanAirFurnaceRebate.com." In lieu of the specified language, however, manufacturers may use alternative language that is approved by the SCAQMD Executive Officer no later than August 31, 2018. This alternative language must be submitted to the Executive Officer no later than August 1, 2018. If the alternative language is not approved, the manufacturer would be required to use the specified language.

In addition, the portion of the SCAQMD website detailing the Clean Air Furnace Rebate Program will include a public outreach program. EGIA, which is administering the rebate program, is also working with furnace manufacturers, distributors, and contractors on plans to target consumers at points of sale. Consumer awareness of the incentive and mitigation fee will be enhanced by these rebate program outreach activities.

CHAPTER 3: IMPACT ASSESSMENT

EMISSION REDUCTIONS AND COST EFFECTIVENESS

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) ANALYSIS

SOCIOECONOMIC IMPACT ASSESSMENT

**DRAFT FINDINGS UNDER CALIFORNIA HEALTH AND SAFETY
CODE SECTION 40727**

INCREMENTAL COST-EFFECTIVENESS

COMPARATIVE ANALYSIS

CONCLUSION AND RECOMMENDATIONS

EMISSION REDUCTIONS AND COST EFFECTIVENESS

The proposed amendments do not result in any significant effect on air quality and do not result in any changes on emissions. As a result, a cost effectiveness analysis is not required. Implementation of PAR 1111 may better inform consumers so that they will select a 14 ng/J unit instead of a 40 ng/J unit that is subject to a mitigation fee, thereby increasing the quantity of compliant units purchased.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) ANALYSIS

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 amendments to Rule 1111 pursuant to: 1) CEQA Guidelines Section 15002(k) – General Concepts, the three-step process for deciding which document to prepare for a project subject to CEQA; and 2) CEQA Guidelines Section 15061 – Review for Exemption, procedures for determining if a project is exempt from CEQA. SCAQMD staff has determined that it can be seen with certainty that there is no possibility that the proposed amendments to Rule 1111 may have a significant adverse effect on the environment. Therefore, the project is considered to be exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Activities Covered by General Rule. A Notice of Exemption will be prepared pursuant to CEQA Guidelines Section 15062 – Notice of Exemption. If the proposed project is approved, the Notice of Exemption will be filed with the county clerks of Los Angeles, Orange, Riverside, and San Bernardino counties.

SOCIOECONOMIC IMPACT ASSESSMENT

The proposed amendments to Rule 1111 add consumer notification requirements for informational materials, including marketing brochures, technical specification sheets, and manufacturers' websites, for furnaces that are not certified to meet the 14 ng/J NO_x limit and are participating in the alternate compliance option. The proposed amendments are administrative in nature and cost impacts to manufacturers are expected to be minimal; as such there are no significant adverse socioeconomic impacts. The proposed amendments do not require that the manufacturers generate additional brochures or specification sheets. Instead, the requirement is to add information to brochures, technical specification sheets, and their website, which they already create, maintain, and distribute. In addition, the proposed amendments do not significantly affect air quality and emission limitations, and therefore, no Socioeconomic Impact Assessment is required under California Health and Safety Codes sections 40440.8 and 40728.5.

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 requires a written analysis comparing the proposed amended rule with existing regulations, if the rule meets certain requirements.

The following provides the draft findings.

Necessity: A need exists to amend Rule 1111 to provide consumer notification requirements for any furnace that is utilizing the mitigation fee alternate compliance option to better inform the consumer that a unit is subject to a mitigation fee and that there are other units that are eligible for a consumer rebate.

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, 40441, 40702, 40725 through 40728, 41508, and 41700.

Clarity: PAR 1111 has been written or displayed so that its meaning can be easily understood by the persons affected by the rule.

Consistency: PAR 1111 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 1111 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 SCAQMD hereby implements, interprets, or makes specific reference to the following statutes: 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, SO_x, NO_x, and their precursors. The proposed amendment does not include new BARCT requirements; therefore this provision does not apply to the proposed amendment.

COMPARATIVE ANALYSIS

~~H&S~~ Health & Safety Code section 40727.2(g) for comparative analysis is applicable when the proposed amended rules or regulations impose, or have the potential to impose, a new emissions limit or standard, or ~~other air pollution control requirements~~ increased monitoring, recordkeeping, or reporting requirements. In this case, a comparative analysis is not required because the amendments do not impose such requirements.

CONCLUSION AND RECOMMENDATIONS

The proposed amendments are needed to inform consumers that noncompliant furnaces are subject to the mitigation fee, while compliant furnaces are commercially available and eligible for a consumer rebate, and thus steer the consumer choice toward the compliant furnaces for much needed NOx emission reduction.

REFERENCES

REFERENCES

SCAQMD, 2009. *Staff Report: Proposed Amended Rule 1111 – NOx Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces*. South Coast Air Quality Management District, November 2009.

SCAQMD, 2014. *Rule 1111 Technology Assessment for Residential Furnaces*. South Coast Air Quality Management District, January 2014.

SCAQMD, 2014. *Staff Report: Proposed Amended Rule 1111 – NOx Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces*. South Coast Air Quality Management District, September 2014.

SCAQMD, 2017. *Final 2016 Air Quality Management Plan*. South Coast Air Quality Management District, March 2017.

SCAQMD, March 2018. *Staff Report: Proposed Amended Rule 1111 – NOx Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces*. South Coast Air Quality Management District, September 2014.

SCAQMD, March 2018. *Board letter: Execute Contract to Implement Consumer Rebate Program for Rule 1111 Compliant Natural Gas-Fired, Fan-Type Central Furnaces*

RESPONSE TO COMMENTS

RESPONSE TO COMMENTS

SCAQMD staff held a public consultation meeting on April 13, 2018, at the SCAQMD Diamond Bar headquarters. There were no comment letters or emails received by the comment end date of April 24, 2018. However, stakeholders did offer comments at the March 28, 2018, Working Group meeting, April 13, 2018, public consultation meeting, the April 20 and May 18, 2018, Stationary Source Committee meetings, and other time during the rulemaking process. The comments and staff's responses are summarized below:

Mitigation Fee Increase

- 1. Comment:** Labeling both the shipping box and furnace is burdensome to the manufacturers.

Response: The Proposed Rule language has been modified to eliminate the requirement to label the shipping box and furnace.
- 2. Comment:** The label on the furnace may not inform consumers.

Response: The Proposed Rule language has been modified to eliminate the requirement to label the shipping box and furnace.
- 3. Comment:** Consumers could be more effectively informed by websites and manufacturer and contractor literature.

Response: Staff is recommending the consumer notification language be required on informational materials, including consumer brochures, technical specification sheets, and manufacturers' websites promoting products. The SCAQMD website will also provide information on the rebate program and mitigation fee.
- 4. Comment:** The proposed amendment to Rule 1111 is an over-regulatory approach.

Response: The proposed amendment to Rule 1111 is an appropriate level of regulation. To effectuate the intent of promoting greater public awareness, the current proposal is based on stakeholders' recommendations.

ATTACHMENT H



**South Coast
Air Quality Management District**

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

SUBJECT: NOTICE OF EXEMPTION FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

PROJECT TITLE: PROPOSED AMENDED RULE 1111 – REDUCTION OF NOX EMISSIONS FROM NATURAL-GAS-FIRED, FAN-TYPE CENTRAL FURNACES

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.

SCAQMD staff has reviewed the proposed project to amend Rule 1111 - Reduction of NOx Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces pursuant to: 1) CEQA Guidelines Section 15002(k) - General Concepts, the three-step process for deciding which document to prepare for a project subject to CEQA; and 2) CEQA Guidelines Section 15061 - Review for Exemption, procedures for determining if a project is exempt from CEQA.

The project proposes to amend Rule 1111 to add a new consumer notification requirement, effective October 1, 2018, that will be applicable to any furnace that is made available for distribution or sale inside of the SCAQMD pursuant to an alternate compliance option in lieu of meeting the NOx emission limit of 14 nanograms per Joule (ng/J). The proposed amendments to Rule 1111 would require a manufacturer that distributes or publishes "Informative Materials," including the consumer brochure, technical specification sheet for the furnace, and the manufacturer's website promoting the furnace, to clearly display the following language: *"If installed in SCAQMD only: This furnace does not meet the SCAQMD Rule 1111 NOx emission limit (14 ng/J), and thus is subject to a mitigation fee of up to \$450. This furnace is not eligible for the Clean Air Furnace Rebate Program: www.CleanAirFurnaceRebate.com."* Alternately, a manufacturer may use other language to comply with the proposed requirement provided that it is submitted to the Executive Officer by August 1, 2018 and approved by the Executive Officer no later than August 31, 2018.

SCAQMD staff has determined that it can be seen with certainty that there is no possibility that the proposed amendments to Rule 1111 may have a significant adverse effect on the environment. Therefore, the project is considered to be exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Activities Covered by General Rule. A Notice of Exemption has been prepared pursuant to CEQA Guidelines Section 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 Ryan Bañuelos (c/o Planning, Rule Development and Area Sources) at the above address. Mr. Bañuelos can also be reached at (909) 396-3479. Ms. Yanrong Zhu is also available at (909) 396-2457 to answer any questions regarding the proposed amended rule.

Date: June 20, 2018

Signature:

A handwritten signature in black ink, appearing to read "Barbara Radlein".

Barbara Radlein
Program Supervisor, CEQA Section
Planning, Rules, and Area Sources

Reference: California Code of Regulations, Title 14

NOTICE OF EXEMPTION

To: County Clerks Counties of Los Angeles, Orange, Riverside, and San Bernardino	From: South Coast Air Quality Management District 21865 Copley Drive Diamond Bar, CA 91765
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Project Title: Proposed Amended Rule 1111 – Reduction of NOx Emissions From Natural-Gas-Fired, Fan-Type Central Furnaces

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: The project proposes to amend Rule 1111 to add a new consumer notification requirement, effective October 1, 2018, that will be applicable to any furnace that is made available for distribution or sale inside of the SCAQMD pursuant to an alternate compliance option in lieu of meeting the NOx emission limit of 14 nanograms per Joule (ng/J). The proposed amendments to Rule 1111 would require a manufacturer that distributes or publishes “Informative Materials,” including the consumer brochure, technical specification sheet for the furnace, and the manufacturer’s website promoting the furnace, to clearly display the following language: “*If installed in SCAQMD only: This furnace does not meet the SCAQMD Rule 1111 NOx emission limit (14 ng/J), and thus is subject to a mitigation fee of up to \$450. This furnace is not eligible for the Clean Air Furnace Rebate Program: www.CleanAirFurnaceRebate.com.*” Alternately, a manufacturer may use other language to comply with the proposed requirement provided that it is submitted to the Executive Officer by August 1, 2018 and approved by the Executive Officer no later than August 31, 2018.

Public Agency Approving Project: South Coast Air Quality Management District	Agency Carrying Out Project: South Coast Air Quality Management District
----------------------------------------------------------------------------------------	------------------------------------------------------------------------------------

Exempt Status: CEQA Guidelines Section 15061(b)(3) – Activities Covered by General Rule

Reasons why project is exempt: SCAQMD staff has reviewed the proposed amendments to Rule 1111 pursuant to: 1) CEQA Guidelines Section 15002(k) - General Concepts, the three-step process for deciding which document to prepare for a project subject to CEQA; and 2) CEQA Guidelines Section 15061 - Review for Exemption, procedures for determining if a project is exempt from CEQA. To comply with the proposed amendments to Rule 1111, original equipment manufacturers (OEMs) would be required to distribute or publish “Informative Materials” that include the above prescribed language or other language approved by the Executive Officer, for each furnace that qualifies for the alternate compliance option and does not meet the 14 ng/J NOx emission limit but is made available for sale or distribution inside of the SCAQMD. The proposed project is administrative in nature such that there would be no construction or operational activities that would create emissions impacts in order for OEMs to comply with the new requirements contained in the proposed amendments to Rule 1111. Therefore, SCAQMD staff has determined that it can be seen with certainty that there is no possibility that the proposed amendments to Rule 1111 may have a significant adverse effect on the environment. Therefore, the project is considered to be exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Activities Covered by General Rule.

Date When Project Will Be Considered for Approval (subject to change):
SCAQMD Governing Board Hearing: July 6, 2018; SCAQMD Headquarters

CEQA Contact Person: Mr. Ryan Bañuelos	Phone Number: (909) 396-3479	Email: rbañuelos@aqmd.gov	Fax: (909) 396-3982
Rule Contact Person: Ms. Yanrong Zhu	Phone Number: (909) 396-3289	Email: yzhu1@aqmd.gov	Fax: (909) 396-3324

Date Received for Filing: _____ **Signature:** _____ *(Signed Upon Board Approval)*
Barbara Radlein
Program Supervisor, CEQA Section
Planning, Rule Development & Area
Sources

Proposed Amended Rule (PAR) 1111

NOx Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces

Governing Board Meeting

July 6, 2018

Rule 1111 Background

- Applies to residential and commercial natural gas-fired fan-type central furnaces
- Regulates manufacturers, distributors, sellers, and installers
- March 2, 2018 amendment extended and increased mitigation fee option for units not meeting 14 ng/J limit
- In addition, Board directed staff to add labeling on units to inform consumers that:
 - Unit is subject to mitigation fee; and
 - Other units are eligible for a rebate

Working With Stakeholders

Initial Consideration:

Label the applicable furnace and its shipping container

Stakeholders Comments:

- Consumers will not see label on furnace or shipping container
- Website and brochures more effective to reach consumer

New Approach:

No changes to label on unit or shipping container; inform consumer using:

- Manufacturers' websites
- Brochures
- Technical specification sheets

Staff Proposal

Customer Notification Requirement Provision (Effective 10/1/18)

- Manufacturer using the mitigation fee option in lieu of meeting 14 ng/J must inform the consumer that the furnace:
 - Is subject to a mitigation fee; and
 - Is not eligible for the rebate program

Where the Notification is Displayed

- Consumer brochures;
- Technical specification sheets; and
- Manufacturer's website promoting the furnace

Notification Language*

- "If installed in SCAQMD only: This furnace does not meet the SCAQMD Rule 1111 NOx emission limit (14 ng/J), and thus is subject to a mitigation fee of up to \$450. This furnace is not eligible for the Clean Air Furnace Rebate Program: www.CleanAirFurnaceRebate.com."

* PAR 1111 allows alternative language as approved by the Executive Officer

Clean Air Furnace Rebate Program



- Established to incentivize consumers to purchase and install 14 ng/J furnaces in the SCAQMD instead of the 40 ng/J units that are subject to a mitigation fee
- \$500 per furnace for the first 6000 rebates (or more if additional fund being approved), \$300 per condensing furnace and \$200 per each other type of furnace thereafter
- Contract with Electric & Gas Industries Association (EGIA) for program implementation
- Program website: www.CleanAirFurnaceRebate.com
- Program launched: June 20, 2018

Staff Recommendations

■ Adopt Resolution

- Determining that the proposed amendments to Rule 1111
 - Reduction of NOx Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces, are exempt from the requirements of the California Environmental Quality Act
- Amending Rule 1111 – Reduction of NOx Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces

BOARD MEETING DATE: July 6, 2018

AGENDA NO. 27

REPORT: Receive and File 2017 Annual Report on AB 2588 Program and Approve Updates to Facility Prioritization Procedure, AB 2588 and Rule 1402 Supplemental Guidelines, and Guidelines for Participating in Rule 1402 Voluntary Risk Reduction Program

SYNOPSIS: The Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588) requires local air pollution control districts to prepare an annual report. The report provides the public with information regarding SCAQMD programs to reduce emissions of toxic air contaminants. This annual update describes the various activities in 2017 to satisfy the requirements of AB 2588 and Rule 1402, such as quadrennial emissions reporting and prioritization, the preparation and review of Air Toxics Inventory Reports, Health Risk Assessments, Voluntary Risk Reduction Plans, Risk Reduction Plans, and additional SCAQMD activities related to air toxics. Staff is also updating the Facility Prioritization Procedure, the AB 2588 and Rule 1402 Supplemental Guidelines, and the Guidelines for Participating in the Rule 1402 Voluntary Risk Reduction Program to update information and provide more clarity for the implementation of AB 2588 and Rule 1402. These actions are to receive and file the 2017 Annual Report on the AB 2588 Air Toxics "Hot Spots" Program, and to approve revisions to: 1) Facility Prioritization Procedure for the AB 2588 Program; 2) AB 2588 and Rule 1402 Supplemental Guidelines; and 3) Guidelines for Participating in the Rule 1402 Voluntary Risk Reduction Program.

COMMITTEE: Stationary Source, June 15, 2018, Reviewed

RECOMMENDED ACTIONS:

1. Receive and File:
 - a. 2017 Annual Report on the AB 2588 Program.

2. Approve updates to the following guidance documents:
 - a. Facility Prioritization Procedure for the AB 2588 Program;
 - b. AB 2588 and Rule 1402 Supplemental Guidelines; and
 - c. Guidelines for Participating in the Rule 1402 Voluntary Risk Reduction Program.

Wayne Nastri
Executive Officer

PF:SN:JW:VM

Introduction

As required under the California Health and Safety Code Section 44363, staff has prepared the “2017 Annual Report on the AB 2588 Program.” This annual report summarizes SCAQMD’s air toxics program activities in 2017, including the Air Toxics “Hot Spots” Information and Assessment Act (or AB 2588) activities, rule development activities, and other air toxic related programs, such as analysis and review of the final version of U.S. EPA’s National-Scale Air Toxics Assessment (NATA) for 2014, air toxic source testing, and air toxic monitoring efforts. The annual report will be available on SCAQMD’s website and distributed to county boards of supervisors, city councils, and local health officers.

Background

The AB 2588 Program, combined with implementation of Rule 1402, includes requirements for toxic emissions inventories, categorizing and prioritizing facilities, and reviewing and approving detailed Air Toxic Inventory Reports (ATIRs), Health Risk Assessments (HRAs), public notifications, Voluntary Risk Reduction Plans (VRRPs) and Risk Reduction Plans (RRPs).

There are two broad classes of facilities within the AB 2588 Program: core facilities, and facilities in the industry-wide source category. Industry-wide source category facilities are generally small businesses with relatively similar emission profiles (such as gas stations and autobody shops). Facilities that are in an industry-wide source category have fewer requirements under the AB 2588 Program than core facilities. Some industry-wide categories have requirements in source-specific rules to address toxic air contaminants.

Core facilities are required to report their air toxic emissions to SCAQMD quadrennially through the web-based Annual Emissions Reporting (AER) Program. Currently there are 432 facilities in SCAQMD’s core AB 2588 Program. Of these 432 facilities that report their air toxic emissions quadrennially, 154 facilities were required to submit their reports in 2017. Additionally, on October 7, 2016, Rule 1402 was amended to add requirements for Potentially High Risk Level facilities that requires

submittal of an Early Action Reduction Plan, ATIR, and the concurrent submittal of a HRA and RRP. So far, three facilities have been designated as Potentially High Risk Level facilities under Rule 1402.

From the beginning of the AB 2588 Program in 1987 through the end of 2017, staff has reviewed and approved 339 HRAs from 310 facilities. Of these, 55 facilities were required to perform public notification activities and 27 facilities were required to implement risk reduction measures.

2017 Accomplishments

The attached report summarizes staff activities in 2017 for the AB 2588 Program, implementation of Rules 1401 and 1402, air toxic monitoring and source testing performed in conjunction with the AB 2588 Program and Rule 1402, dispersion modeling support for Rules 1401 and 1420.2, source-specific air toxic rule development efforts, analysis of toxic program impacts from the addition of new or revised air toxics, and future activities.

Summary of Activities for Specific AB 2588 Program Facilities

In 2017, staff initiated audit activities of quadrennial reports for 40 facilities with priority scores greater than 10 and reviewed a variety of work products submitted by 35 different facilities as a requirement of the AB 2588 Program. Key activities conducted include review of 14 Air Toxics Inventory Reports, three Health Risk Assessments, five Risk Reduction Plans, and 10 Voluntary Risk Reduction Plans. Many of these key activities were for facilities that are in Group I, which are facilities that tend to have more sources and are more complex such as refineries and other industrial facilities. In 2017, facilities that met the eligibility criteria were notified of the option for either submitting a traditional Air Toxics Inventory Report and Health Risk Assessment or a Voluntary Risk Reduction Plan. Of the 13 facilities that were offered the option to prepare either an Air Toxics Inventory Report or Voluntary Risk Reduction Plan, six facilities selected the Voluntary Risk Reduction Plan option, four facilities selected to prepare an Air Toxics Inventory Report through the traditional AB 2588 process, and three facilities submitted emissions inventory corrections which resulted in revised priority scores of less than 10. One facility was notified as a Potentially High Risk Level facility. Overall, a total of 76 documents were reviewed in 2017 with some facilities having multiple documents submitted for staff review. Table 1 lists the facilities that either had an Air Toxics Inventory Report (ATIR), Health Risk Assessment (HRA), or Risk Reduction Plan (RRP) reviewed by staff in 2017. The attached Annual Report provides detailed information regarding the AB 2588 Program activities at each facility.

Table 1 – AB 2588 Program Facilities in 2017

Facility Name	ID No.	Facility Name	ID No.
Aerocraft	23752	Matrix Oil	182970
All American Asphalt	132954	MM West Covina*	113873
Anadite*	8015	Orange County Sanitation District, Fountain Valley*	17301
Anaplex	16951	Orange County Sanitation District, Huntington Beach*	29110
Boral Roofing	1073	Phillips 66 Carson Refinery*	171109
Bowman Plating Company	18989	Phillips 66 Wilmington Refinery*	171107
Chevron Products Co. *	800030	Quemetco	8547
Equilon Enter. LLC, Shell Oil Prod. US*	800372	So Cal Gas Co./Playa Del Rey Storage Facility	8582
Fontana Paper Mills	11716	SoCal Holding, LLC*	169754
Gerdau/TAMCO	18931	Tesoro Calciner*	174591
Glendale City Water and Power*	800327	Tesoro Los Angeles Refinery*	800436 174655 174694 174703
Griswold Industries	800318	Tesoro Sulfur Recovery Plant*	151798
GS II, Inc.*	183567	Torrance Refining*	181667
Hixson Metal Finishing	11818	Triumph Processing	800267
Hyperion Water Reclamation Plant, City of Los Angeles Bureau of Sanitation*	800214	UC Irvine*	800288
Kaiser Aluminum	16338	Ultramar (Valero) Refinery*	800026
LA City, Bureau of Street Maintenance	116480	Universal City Studios*	800202
Lubeco	41229		

Note: * indicates facilities notified to prepare either an ATIR or a VRRP.

Air Monitoring and Source Testing Activities to Support the AB 2588 Program

Staff also engages in air toxics monitoring and air toxics source testing at and near many facilities. Based on monitoring efforts of hexavalent chromium in Paramount, SCAQMD found high levels near two facilities: Aerocraft Heat Treating Company and Anaplex Corporation. Both Aerocraft and Anaplex were designated as Potentially High Risk Level Facilities under Rule 1402 in 2016. Additional monitoring in locations approximately one mile to the southeast also found high levels of hexavalent chromium near Lubeco, Inc. As a result, Lubeco, Inc. was designated as a Potentially High Risk Level Facility in September 2017. Emissions monitoring near the facilities revealed sources of hexavalent chromium that SCAQMD was not aware of and were unregulated. As a result, rulemaking was initiated to establish emission reduction requirements for these sources.

In July 2017, staff began special air monitoring in the city of Compton to measure levels of hexavalent chromium near several metal-processing facilities in the community, with an emphasis on chromium plating and anodizing plants due to their close proximity to each other and to sensitive receptors. This effort will determine whether these facilities pose a significant health risk to the community. Staff will continue to identify high-risk facilities, prioritize them based on the degree of risk and take action to immediately reduce emissions.

Rules 1401 and 1420.2 Dispersion Modeling Review

In 2017, staff processed approximately 2,100 Rule 1401 applications for 1,300 facilities. Under Rule 1401, staff reviews new and modified permit applications to ensure that the health risk thresholds are not exceeded. Staff also reviews and verifies air quality and HRA analyses for Hearing Board cases. In 2017, staff reviewed and approved 20 HRAs for permit projects.

Under Rule 1420.2, air dispersion modeling is used to identify the appropriate location for placement of ambient air monitors. In 2017, staff approved four ambient monitoring plans for Rule 1420.2 facilities.

National Air Toxics Assessment

Every three years, beginning in 1996, the U.S. EPA prepares a National Air Toxics Assessment.¹ Staff coordinates with U.S. EPA staff to ensure that NATA incorporates the best available local emissions data. The current triennial inventory process began in September 2016 for the purpose of reviewing data from the 2014 National Emissions Inventory. Staff initiated review of data from approximately 70 facilities determined to be high risk within the SCAQMD's jurisdiction. Following the investigation, staff made several corrections to emissions, source characteristics, process, pollutants, and stack parameters for approximately 20 facilities. This information was provided to U.S. EPA in May 2017.

¹ The U.S. EPA's web portal is at: <https://www.epa.gov/national-air-toxics-assessment>

Rules Adopted or Amended in 2017

During 2017, four toxic rules were adopted or amended: 1) Rule 1430 – Control of Emissions from Metal Grinding Operations at Metal Forging Facilities, adopted in March; 2) Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants, adopted in July and amended in December; 3) Rule 1401 – New Source Review of Toxic Air Contaminants, amended in September; and 4) Rule 1420 – Emissions Standard for Lead, amended in December.

Future Activities

In addition to the routine AB 2588 Program implementation activities, staff plans to:

- Audit quadrennial emissions inventories for 50 facilities;
- Develop proposed Rules 1407.1, 1410², 1435, and 1480;
- Develop proposed amended Rules 1403, 1407, and 1469;
- Track development of potential REL revisions by OEHHA for hexamethylene diisocyanate and toluene; and
- Continue to work with CARB and through the California Air Pollution Control Officers Association (CAPCOA) Toxics and Risk Managers Committee to develop HRA guidelines for the industry-wide category of gasoline dispensing facilities.

Updates to the Facility Prioritization Procedure, the AB 2588 & Rule 1402 Supplemental Guidelines, and the Guidelines for Participating in the Rule 1402 Voluntary Risk Reduction Program

In June 2016, the Board adopted revisions to the Facility Prioritization Procedure and the AB 2588 and Rule 1402 Supplemental Guidelines in conjunction with amendments to Rule 1402 that incorporated the 2015 Office of Environmental Health Hazard Assessment (OEHHA) Risk Assessment Guidelines update.

In November 2016, the Board adopted amendments to the Facility Prioritization Procedure by adding a more refined screening process that would more accurately identify high priority facilities and improve staff's ability to focus on the highest priority facilities. Staff is proposing to update the Facility Prioritization Procedure to incorporate the most recent meteorological dataset (Version 9) and adjusting the calculation of the non-cancer acute score. The proposed revised calculation methodology for non-cancer acute is streamlined to account for short-term exposure at the facility fenceline.

In November 2016, the Board adopted amendments to the AB 2588 and Rule 1402 Supplemental Guidelines to clarify language and by adding guidance on different elements of the AB 2588 Program. Staff is proposing to update the AB 2588 and Rule

² Rule 1410 was adopted in 1991 but was suspended the following year.

1402 Supplemental Guidelines and provide more clarity for implementation of the AB 2588 Program and Rule 1402.

In October 2016, the Board adopted amendments to Rule 1402 to include a Voluntary Risk Reduction Program that allows facilities that commit to reducing their health risk 60 percent below the current risk reduction thresholds in Rule 1402 to use a modified public notification approach. Additionally, the “Guidelines for Participating in Rule 1402 Voluntary Risk Reduction Program” was developed which included information for facilities that elect to participate in the Voluntary Risk Reduction Program. Staff is proposing to update the Guidelines for Participating in the Rule 1402 Voluntary Risk Reduction Program to provide clarity.

Attachments

1. Annual Report on AB 2588 Air Toxics “Hot Spots” Program
2. Facility Prioritization Procedure for the AB 2588 Program
3. AB 2588 and Rule 1402 Supplemental Guidelines
4. Guidelines for Participating in the Rule 1402 Voluntary Risk Reduction Program
5. Board Meeting Presentation

ATTACHMENT 1

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT



Annual Report on AB 2588 Air Toxics “Hot Spots” Program

July 2018

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EXECUTIVE SUMMARY

The Air Toxics “Hot Spots” Information and Assessment Act (AB 2588) is a key statewide program implemented by air districts to address health risks from existing permitted facilities. State law requires the South Coast Air Quality Management District (SCAQMD) to prepare an Annual Report of activities. This report fulfills that requirement and also provides a summary of staff activities in relation to other toxic air contaminant programs in calendar year 2017.

In 2017, staff reviewed a variety of work products submitted by 35 different facilities as a requirement of the AB 2588 Program. Staff also continued reviewing reports and proposed risk reduction measures for two facilities in the city of Paramount that have been identified as Potentially High Risk Level Facilities (potential cancer risk greater than one hundred in one million or a total acute or chronic HI greater than five). Through SCAQMD’s ambient monitoring efforts in the cities of Paramount and Long Beach, staff designated a third facility, Lubeco Inc., in the city of Long Beach as a Potentially High Risk Level Facility.

In addition to AB 2588 Program activities, SCAQMD staff worked on a variety of other toxic programs in 2017, including completing rule development work on the Rule 1401 guidance document, review of the final version of United States Environmental Protection Agency’s (U.S. EPA) National Air Toxics Assessment (NATA) for 2014, source testing, and air monitoring efforts. In addition, staff analyzed changes and potential impacts to permitting and AB 2588 from the Office of Environmental Health Hazard Assessment (OEHHA) regarding new or revised toxic air contaminant health values.

1. INTRODUCTION

SCAQMD has a comprehensive air toxics program. At the heart of this program are Rule 1401 – New Source Review of Toxic Air Contaminants, to ensure toxic emissions from new and modified sources do not exceed specified risk levels and Rule 1402 – Control of Toxic Air Contaminants from Existing Sources, which implements various aspects of SCAQMD’s AB 2588 Program. AB 2588 is the Air Toxics “Hot Spots” Information and Assessment Act, Health and Safety (H&S) Code Section 44300 et seq. SCAQMD’s air toxic program also includes a series of source specific rules that address toxic air contaminants for specific industries or equipment categories.

This report summarizes SCAQMD’s air toxics program activities in 2017, including AB 2588 activities, rule development activities, dispersion modeling support for rules and permits, and other air toxic related programs such as ambient monitoring efforts in Paramount, and source testing and air monitoring efforts in support of the AB 2588 Program. This report also satisfies Section 44363 of the California H&S Code that requires SCAQMD to annually prepare and publish a status and forecast report of all AB 2588 Program activities.

The AB 2588 Program, combined with implementation of Rule 1402, includes requirements for toxic emissions inventories, categorizing and prioritizing facilities, reviewing and approving detailed Air Toxics Inventory Reports (ATIR), Health Risk Assessments (HRA), Risk Reduction Plans (RRP), and providing public notification. Rule 1402 was amended on October 7, 2016 to include a provision to allow facilities to participate in a Voluntary Risk Reduction Program. The Voluntary Risk Reduction Program is an alternative to complying with the traditional AB 2588 and Rule 1402 approach that provides facilities that meet specific criteria, an opportunity to reduce health risks below the Notification Risk Level with a Modified Public Notification approach. Qualifying facilities must submit a Voluntary Risk Reduction Plan (VRRP) for approval. The Voluntary Risk Reduction Program will achieve risk reductions both sooner and beyond what is required in the traditional Rule 1402 process. In addition to the Voluntary Risk Reduction Program, amendments included special requirements for Potentially High Risk Level Facilities. Potentially High Risk Facilities have an estimated cancer risk that exceeds 100 in-one-million which must implement an Early Action Reduction Plan while the facility concurrently prepares their Health Risk Assessment and Risk Reduction Plan.

1.1 Background

There are two broad classes of facilities within the AB 2588 Program: core facilities and facilities in the industry-wide source categories. Industry-wide source facilities are generally small businesses with relatively similar emission profiles (such as gas stations and autobody shops). Facilities that are in industry-wide source categories have fewer requirements under AB 2588 than core facilities and are discussed further in Section 2.4 of this report. Core facilities must regularly report their emissions of toxic air contaminants and do the following:

- **Emissions Reporting** – Core facilities in the AB 2588 Program submit an air toxics inventory every four years through the Annual Emissions Reporting (AER) Program.
- **Prioritization** - From the reported toxic emissions, SCAQMD staff prioritizes facilities, using a state – required procedure approved by the Governing Board, into three categories:

high, intermediate, and low. High priority facilities are then asked to prepare an ATIR or elect to prepare a VRRP, if eligible.

- **Health Risk Assessment** - High priority facilities might need to prepare a HRA, if the ATIR indicates that the facility is still considered a high priority.
- **Public Notice** - If the health risk reported in the HRA exceeds the Notification Risk Levels in Rule 1402 (a Maximum Individual Cancer Risk (MICR) of ten in one million, a total acute or chronic Hazard Index (HI) of one or the more stringent of either the National Ambient Air Quality Standard (NAAQS) for lead or ambient concentration limit in an applicable SCAQMD rule), then the facility is required to provide public notice to the affected community.
- **Risk Reduction** - Facilities with health risks above the Action Risk Levels in Rule 1402 (a MICR of twenty five in one million, cancer burden of one half, a total acute or chronic HI of three, or the NAAQS for lead) must reduce their risks below those levels.

Figure 1 provides an overview of the AB 2588 Program and the different paths a core facility must follow under Rule 1402. Currently there are 432 core facilities in SCAQM's AB 2588 Program.

SCAQMD staff reviews HRAs to ensure they follow methodologies established by OEHHA and the California Air Resources Board (CARB), as required by H&S Code Section 44360(c). The health risk values presented in this Annual Report that were approved prior to 2015 were calculated using the methodologies available at the time of HRA approval, and have not been recalculated based on more recent guidance.¹ OEHHA's HRA Guidelines were revised and approved in early 2015 and takes into account more recent science that has documented greater risks when children are exposed to cancer causing compounds, in addition to other changes. This change in methodology results in residential cancer risks that are about two to six times higher for a given level of exposure compared to the previous methodology. The health risks in all HRAs finalized by SCAQMD staff in 2015 and later were calculated using the 2015 OEHHA HRA Guidelines.

¹ The potential effect of the 2015 OEHHA HRA Guidelines on SCAQMD's AB 2588 Program is discussed in detail in the staff report to amended Rules 212, 1401, 1401.1, and 1402 found here: <http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2015/2015-jun1-028>.

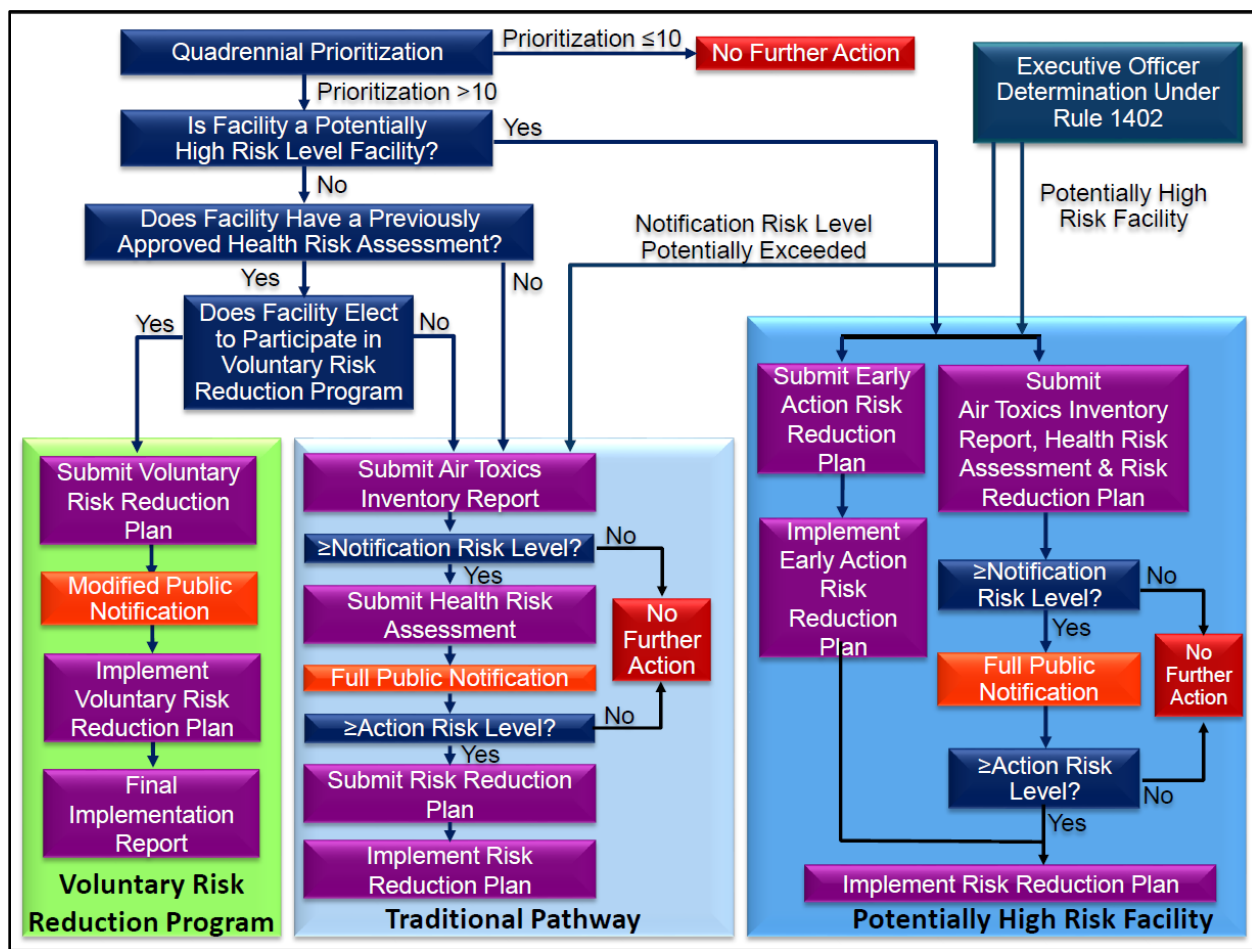


Figure 1 – Overview of the AB 2588 “Hot Spots” Program

From the beginning of the AB 2588 Program in 1987 through the end of 2017, staff has reviewed and approved 339 HRAs from 310 facilities. There are more approved HRAs than facilities as some facilities have prepared more than one HRA. Of these 310 facilities, 27 facilities were required to implement risk reduction measures. 55 were required to perform public notification activities while the remaining facilities were below the public notification threshold. As a result of the AB 2588 Program, about 95 percent of facilities that have been in the Program historically have HRAs demonstrating cancer risks below ten in a million and a hazard index (HI) of less than 1.0 for both non-cancer acute and non-cancer chronic, or their emissions have been low enough to not require an HRA. The approved HRAs illustrated in Figures 2, 3, and 4 are based on the information in Appendix A. Appendix A lists the core facilities and the health risks from their approved HRAs. Table A-1 in Appendix A lists the facilities in order of their cancer risks and Table A-2 in Appendix A is ordered by facility ID. Table A-3 in Appendix A lists facilities which have prepared a RRP for the AB 2588 Program and their corresponding health risks [H&S Code 44363(a) (2) and (3)]. Appendix B shows trends in ambient air toxics in the South Coast Air Basin (Basin). Appendix C contains a list of acronyms and abbreviations used in this report.

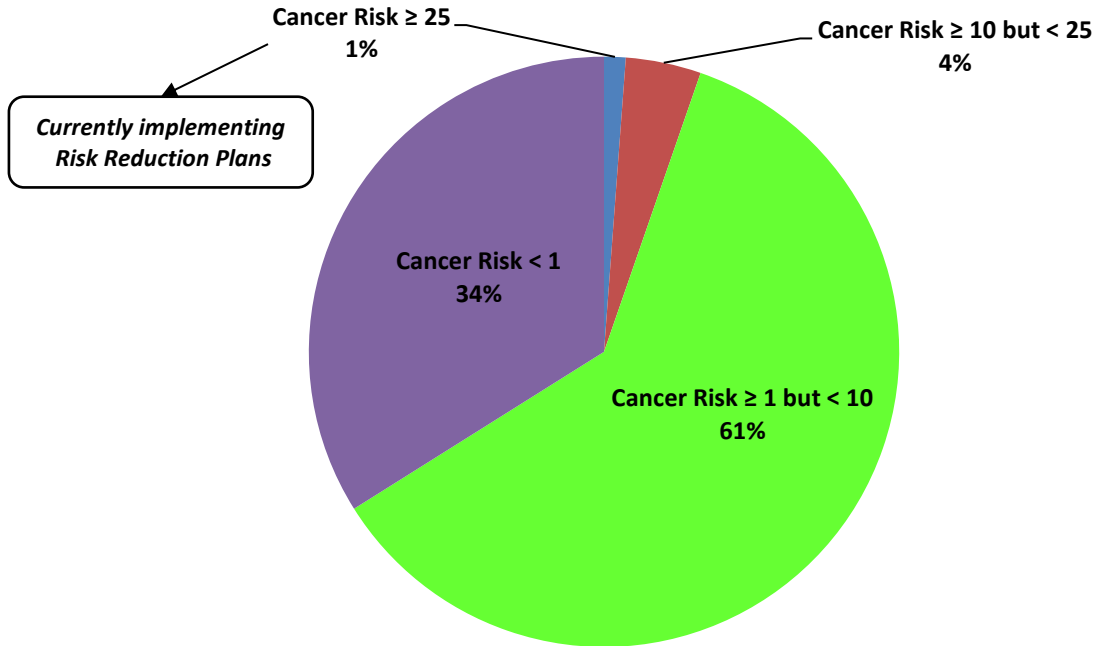


Figure 2 – Distribution of Cancer Risks (Chances in a Million) for AB 2588 Facilities with an Approved HRA

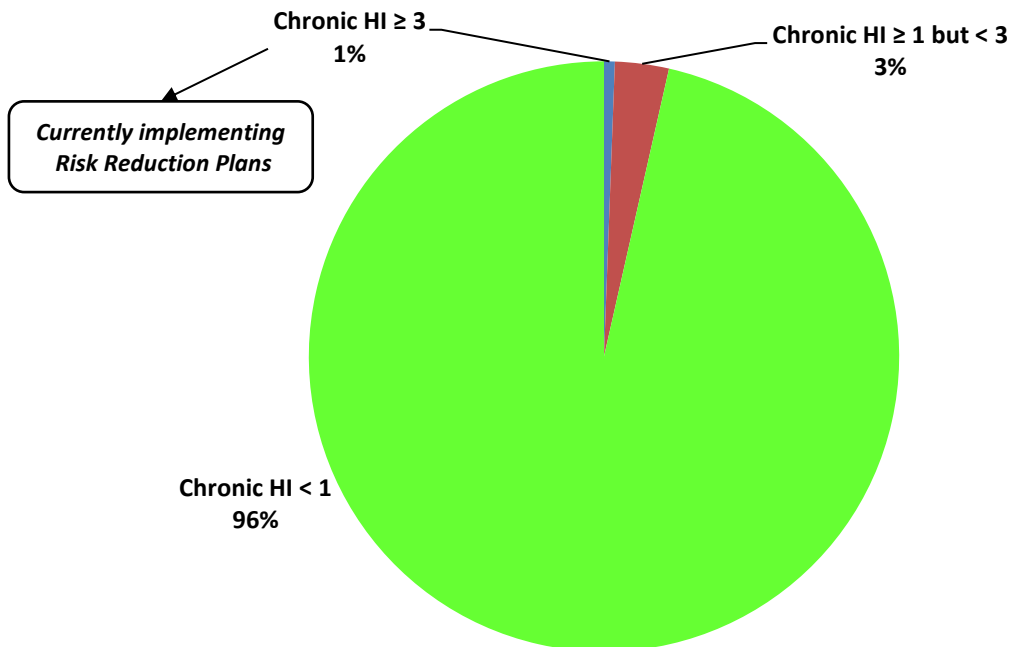


Figure 3 – Distribution of Chronic Hazard Indices for AB 2588 Facilities with an Approved HRA

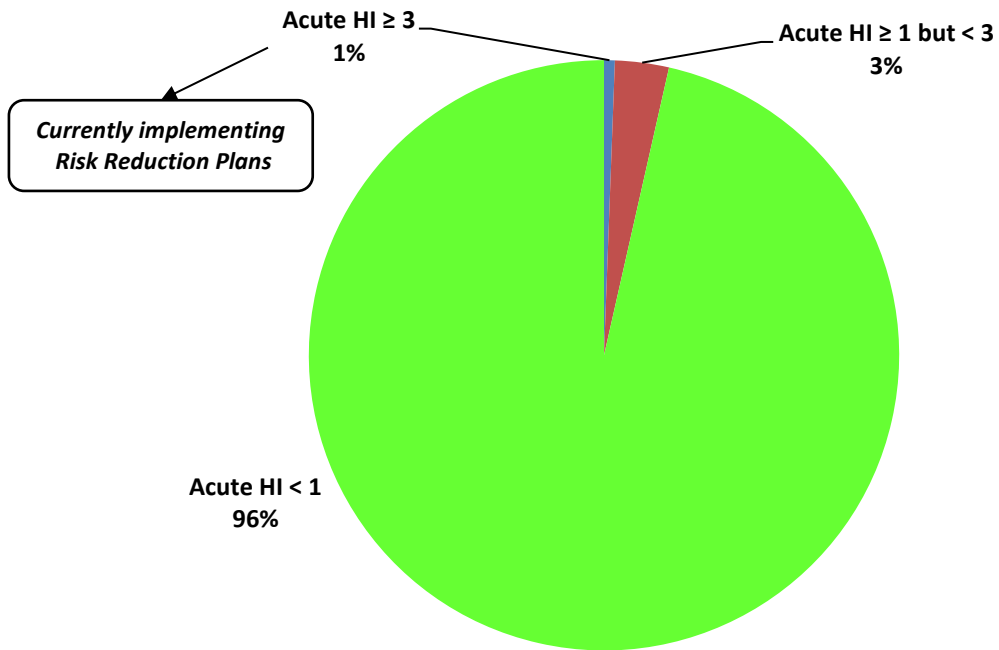


Figure 4 – Distribution of Acute Hazard Indices for AB 2588 Facilities with an Approved HRA

2. 2017 TOXICS ACTIVITIES

This section highlights SCAQMD staff activities in 2017 for various stages of the AB 2588 Program, implementation of Rules 1401 and 1402, air monitoring and source testing projects conducted in conjunction with the AB 2588 Program and Rule 1402, development of industry-wide source category HRAs, source-specific air toxic rule development efforts that address toxic air contaminants for specific industries or equipment categories, Rule 1401 permitting and HRA modeling review, and Rule 1420.2 modeling review.

2.1 Air Toxic Inventory Reports and Health Risk Assessments

Under the AB 2588 Program, facilities are required to report their toxic emissions to SCAQMD quadrennially (i.e., once every four years) through the web-based AER Program in a streamlined reporting process to obtain a preliminary inventory of toxic air contaminants. During the interim years, facilities continue to report toxic emissions through the AER Program for 23 toxic air contaminants. Under the quadrennial reporting process, facilities report emissions of 177 toxic air contaminants along with the distance to the nearest residential and worker receptor to calculate the cancer and non-cancer priority scores for each facility. Every year, criteria and toxic emissions data for the previous calendar year are posted to SCAQMD's FIND web tool.² In 2017, 154 facilities were required to report their quadrennial toxic emission inventory updates. Based on emissions inventory submittals, SCAQMD staff calculated priority scores for each facility taking into account potency, toxicity, and quantity of hazardous materials released from the facility; the proximity of the facility to potential receptors, including, but not limited to, hospitals, schools, daycare centers, residences, and worksites; and any other factors that SCAQMD staff determined would indicate the facility may pose a significant risk to receptors. SCAQMD's Prioritization Procedure also includes adjustment factors for exposure period, averaging times, and the treatment of multi-pathway pollutants.³

Upon calculation of a priority score for each facility, SCAQMD staff conducts a more detailed evaluation and audit of those facilities with a priority score greater than 10 to confirm use of the correct emission factors, control efficiencies, source test methods, and relative proportions of toxic air contaminants. In addition, staff conducts further analyses to confirm the distance to sensitive receptors and workers, and reviews emissions trends and facility changes such as new or modified permitted equipment or pollution controls. In cases where the facility has a prior HRA, staff compares the priority score results with the most recent HRA or RRP, if applicable. The additional information obtained through priority score auditing will often negate the need to require an ATIR and HRA. If, however, the priority score remains greater than 10, the facility is asked to prepare a detailed ATIR or, if eligible, a VRRP.

Facilities that prepare an ATIR or a VRRP must submit a detailed inventory of approximately 450 toxic air contaminants, as well as provide stack parameters and locations using the latest CARB Hotspots Analysis and Reporting Program (HARP).⁴ The most recent version of HARP

² <http://www.aqmd.gov/home/tools/public/find>

³ <http://www.aqmd.gov/home/regulations/compliance/toxic-hot-spots-ab-2588/prioritization>

⁴ <http://www.arb.ca.gov/toxics/harp/harp.htm>

incorporates the methodologies from the 2015 OEHHA HRA Guidelines⁵ and incorporates U.S. EPA's recommended air quality dispersion model called AERMOD⁶ to estimate the concentration of pollutants. Meteorological data for use in HARP and AERMOD can be downloaded from SCAQMD's website.⁷

2.2 Air Monitoring and Source Testing Activities to Support the AB 2588 Program

In addition to collecting and reviewing quadrennial emission inventories based on emission calculations, SCAQMD staff regularly engages in air toxics monitoring and air toxics source testing at and near many facilities. In 2017, as part of the Community Air Toxics Initiative, SCAQMD staff conducted investigations in the cities of Paramount and Compton. The investigations focused on the monitored levels of hexavalent chromium in the area, a known carcinogen that even at low concentrations can cause lung and nose cancers in people after long-term exposure.

2.2.1 Paramount

In 2013, SCAQMD received a series of metallic odor complaints from local community members in the City of Paramount and began investigating local sources of emissions, including initiating a local air sampling study. Metal air toxics were the focus of the monitoring, consistent with the community complaints and with the emissions from metal processing facilities in the area. Monitoring results indicated that there were two metals of concern: nickel and hexavalent chromium.

In 2016, as part of the same ongoing investigation, SCAQMD staff deployed several ambient monitors in mostly industrial areas of the City of Paramount in order to identify the local sources of the hexavalent chromium emissions, and the industrial processes that were generating these emissions. This information was critical in developing solutions to reducing these emissions and their impact on the community. Monitoring of metal contaminants in the industrial areas of the City of Paramount found higher levels of nickel, total chromium, and hexavalent chromium in the neighborhoods very close to the industrial areas, but lower levels in the neighborhoods just a few blocks downwind.

SCAQMD staff continued to conduct inspections, surveillance, and complaint investigations in 2017. Although many of the issues found from inspections were not related to hexavalent chromium, over three dozen Notices of Violation were issued to eight facilities and 94 Notices to Comply were issued to 60 facilities. This resulted in changes to operations and new facilities requiring SCAQMD permits. Additionally, in order to help identify the types of operations and specific facilities that contributed the most to the high levels of hexavalent chromium in the air, SCAQMD staff collected and analyzed 148 samples of dust and debris at 18 facilities and tested emissions from 17 pieces of equipment at six facilities. Orders for Abatement were issued to four facilities: Aerocraft (December 2016), Anaplex (January 2017), Carlton Forge Works (July 2017), and Lubeco (August 2017). Carlton Forge Works in particular was issued an Order for Abatement to reduce odors. Air quality inspectors have been in the area on a regular basis to respond to

⁵ <https://oehha.ca.gov/air/crnrr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk>

⁶ http://www.epa.gov/ttn/scram/dispersion_prefrec.htm#aermod

⁷ <http://www.aqmd.gov/home/library/air-quality-data-studies/meteorological-data/data-for-aermod>

complaints and perform odor surveillance. As a result, the number of odor complaints has fallen and Carlton Forge Works has continued to make changes to their operations to reduce odors. In addition, Aircraft Heat Treating, Anaplex Corporation, and Lubeco were designated as Potentially High Risk Level Facilities under Rule 1402 due to observed high monitored levels of hexavalent chromium near them.

2.2.2 Compton

In July 2017, SCAQMD began special air monitoring in the city of Compton to measure levels of hexavalent chromium near several metal-processing facilities in the community, with an emphasis on chromium plating and anodizing facilities. Similar to Paramount, Compton has several potential chrome-emitting facilities in close proximity to each other and to sensitive receptors (e.g., hospitals, schools, homes, and senior centers). The purpose of the air monitoring effort was to determine whether these facilities pose a significant health risk to the community.

During 2017, 51 inspections of facilities in Compton were conducted. Of these 51 inspections, 16 Notices of Violation were issued, 52 Notices to Comply were issued, and 56 complaints were investigated. Samples were collected every three days and analyzed at SCAQMD's laboratory with the results available on SCAQMD's website.⁸ Although SCAQMD's initial efforts have been focused on metal-processing facilities, there are other potential sources of hexavalent chromium that are being considered, such as cement from cement processing facilities and road construction projects. Updates will continue to be posted to the SCAQMD website.⁹

2.3 Summary of SCAQMD Staff Activities for AB 2588 Facilities in 2017

In 2017, staff addressed facilities in various stages of the AB 2588 process and initiated audit activities on facilities with priority scores greater than 10. Key activities conducted include review of 14 Air Toxics Inventory Reports, three Health Risk Assessments, five Risk Reduction Plans, and 10 Voluntary Risk Reduction Plans. Many of these key activities were for facilities that are in Group I, which are facilities that tend to have more sources and are more complex such as refineries and other industrial facilities. In 2017, facilities that met the eligibility criteria were notified of the option for either submitting a traditional Air Toxics Inventory Report and Health Risk Assessment or a Voluntary Risk Reduction Plans. Of the 13 facilities that were offered the option to prepare either an Air Toxics Inventory Report or Voluntary Risk Reduction Program, six facilities selected the Voluntary Risk Reduction Plan option, four facilities selected to prepare an Air Toxics Inventory Report through the traditional AB 2588 process, and three facilities submitted emissions inventory corrections which resulted in revised priority scores of less than 10. One facility was notified as a Potentially High Risk Level facility. Overall, a total of 76 documents were reviewed in 2017 with some facilities having multiple documents submitted for SCAQMD staff review. Table 1 presents a summary of key activities for facilities participating in the traditional AB 2588 Program and Table 2 presents a summary of key activities for facilities participating in the Rule 1402 Voluntary Risk Reduction Program.

⁸<http://www.aqmd.gov/home/news-events/community-investigations/air-monitoring-activities/reports-data-assessments>

⁹ <http://www.aqmd.gov/home/news-events/community-investigations/air-monitoring-activities>

Table 1 – Actions Taken in 2017 for Facilities in the Traditional AB 2588 Program

Facility Name	ID #	ATIR			HRA			RRP			Status
		R	C	A	R	C	A	R	C	A	
Aerocraft ^a	23752	x	x		x	x		x	x		
All American Asphalt	132954			x			x				
Anadite ^b	8015										Revised Priority Score less than 10
Anaplex ^a	16951	x	x		x	x		x	x		
Boral Roofing	1073	x	x								
Bowman Plating Company	18989									x	
Equilon Enter. LLC, Shell Oil Prod. US ^b	800372										ATIR submittal due in 2018
Fontana Paper Mills	11716	x									
Gerdau/TAMCO	18931										Implementing RRP
Glendale City Water and Power ^b	800327	x									
Griswold Industries	800318	x		x							ATIR and Preliminary HRA shows health risks below Notification Levels
GS II, Inc. ^b	183567	x	x								Initially elected VRRP, but opted out later
Hixson Metal Finishing	11818									x	
Kaiser Aluminum	16338			x							
LA City, Bureau of Street Maintenance	116480										Revised Priority Score less than 10
Lubeco ^a	41229										ATIR, HRA, and RRP submittals due in 2018
Matrix Oil	182970										ATIR submittal due in 2018
MM West Covina ^b	113873	x	x								
Phillips 66 Wilmington Refinery ^b	171107	x	x								
Quemetco	8547							x		x	
So Cal Gas Co./Playa Del Rey Storage Facility	8582	x									
SoCal Holding, LLC	169754										ATIR submittal due in 2018
Triumph Processing	800267	x	x								
UC Irvine ^b	800288	x	x								Revised Priority Score less than 10
Universal City Studios ^b	800202										Revised Priority Score less than 10

Notes:

For ATIRs, HRAs, and RRP: R=Report Received; C=Comment letter sent to facility; A=Report Approved.

^a Classified as Potentially High Risk Level Facility and currently under an Order for Abatement.

^b Indicates facility notified to prepare either an ATIR or a VRRP. Facilities listed in this table elected to prepare an ATIR.

Table 2 – Actions Taken in 2017 for Facilities in the Voluntary Risk Reduction Program

Facility Name	ID #	VRRP			Status
		R	C	A	
Chevron Products Co. ^b	800030	x			
GS II, Inc. ^b	183567	x			Initially elected VRRP, but opted out later
Hyperion Water Reclamation Plant, City of Los Angeles Bureau of Sanitation ^b	800214	x			
Orange County Sanitation District, Fountain Valley ^b	17301	x			
Orange County Sanitation District, Huntington Beach ^b	29110	x			
Phillips 66 Carson Refinery ^b	171109	x	x		
Tesoro Calciner ^b	174591	x			
Tesoro Los Angeles Refinery ^b	800436	x			
	174655				
	174694				
	174703				
Tesoro Sulfur Recovery Plant ^b	151798	x			
Torrance Refining ^b	181667	x	x		
Ultramar (Valero) Refinery ^b	800026	x			

Notes:

For VRRPs: R=Report Received; C=Comment letter sent to facility; A=Report Approved.

^a Classified as Potentially High Risk Level Facility and currently under an Order for Abatement.

^b Indicates facility notified to prepare either an ATIR or a VRRP. Facilities listed in this table elected to prepare a VRRP.

A description of these activities for each facility in Tables 1 and 2 is listed below.

2.3.1 Aerocraft Heat Treating Company (ID 23752) – Paramount¹⁰

Aerocraft Heat Treating Company (Aerocraft) operates a facility in the City of Paramount that processes forgings, castings, bar, plate and rough-machined parts. The facility uses various heat treating furnaces, quench tanks, and metal grinding equipment, as well as plasma cutting operations. Based on ambient monitoring conducted near Aerocraft which showed elevated levels of hexavalent chromium, Aerocraft was officially designated as a Potentially High Risk Level Facility on December 14, 2016. As part of this designation, Aerocraft was required to submit an Early Action Risk Reduction Plan by March 14, 2017, an ATIR by May 16, 2017, a HRA and a RRP by June 13, 2017. (Additional details regarding the ambient monitoring in Paramount and near Aerocraft and events that led up to the designation of Aerocraft as a Potentially High Risk Facility are discussed in the 2016 AB2588 Annual Report and on the SCAQMD's website¹⁰).

The Early Action Risk Reduction Plan was received on March 13, 2017 and after SCAQMD's staff review, a comment letter was sent on April 26, 2017 requesting revisions and resubmittal. Subsequently, on May 4, 2017, a revised Early Action Risk Reduction Plan was received.

¹⁰ Information regarding Aerocraft and compliance-related activities in Paramount can be found at the following link:
<http://www.aqmd.gov/home/news-events/community-investigations/air-monitoring-activities>

On May 16, 2017, Aerocraft submitted an ATIR, and the HRA and RRP were submitted on June 13, 2017, in accordance with the required deadlines. Conditional approval of the revised Early Action Risk Reduction Plan was granted on May 31, 2017. Staff are currently reviewing all submitted documents.

2.3.2 *All American Asphalt (ID 132954) – San Fernando*

All American Asphalt operates a recycled asphalt product processing plant in the City of San Fernando. The company is contracted by the Department of Public Works to recycle and manufacture asphalt for repaving of city streets and roads. The operations involve asphalt batching and blending, an asphalt storage tank, storage silos for crumb rubber, baghouses, and an electrostatic precipitator to control particulate emissions.

All American Asphalt was required to prepare and submit an ATIR on September 21, 2011, based on their 2010 quadrennial emissions inventory. The draft ATIR was submitted on March 19, 2012. A source test was requested by SCAQMD staff for the hot mix dryer baghouse, which was conducted from November 12 through November 14, 2013, submitted on December 19, 2013, and approved on March 18, 2014. A final draft of the ATIR was submitted to SCAQMD on December 17, 2013 and a HRA was requested by the SCAQMD on March 6, 2014. A draft HRA was submitted on July 9, 2014. Health risks reported in the draft HRA were mainly generated from arsenic, naphthalene and hexavalent chromium emissions. In the months following the submittal, a site visit was conducted on January 21, 2015 to verify operations reported in the HRA. OEHHA also approved new HRA Guidelines that placed greater emphasis on infant's and children's higher susceptibility to carcinogenic compounds. The HARP software used to estimate risks was updated on March 6, 2015 by the California Air Resources Board. Because these changes happened after the submittal, the health risks results in the HRA were recalculated. Health risks estimated in the draft HRA were less than the AB 2588 and Rule 1402 notification levels. This draft HRA was finalized and approved on February 1, 2017.

2.3.3 *Anadite Inc. (ID 8015) – South Gate*

Anadite is a metal finishing facility located in the City of South Gate with operations such as cleaning and etching aluminum, titanium, stainless steels, and ferrous alloys, primer and paint application, liquid honing, and sand blasting services. The facility primarily serves the aerospace industry.

On June 30, 2017, SCAQMD staff sent a letter requesting Anadite to prepare either an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2015 annual emissions with hexavalent chromium emissions from a surface preparation tank containing chromic acid and a passivation tank containing nitric acid as the main air toxic contributing to the high priority score.

After a careful review of the facility's 2015 emissions reported to SCAQMD, the facility provided information correcting their reported emissions on July 31, and October 31, 2017. After SCAQMD's staff review and approval of the corrections, the priority score was recalculated and found to be below 10. Subsequently, on December 15, 2017, SCAQMD staff sent a letter informing Anadite of the revised priority score and that no further action was required in response to the original notice.

2.3.4 *Anaplex Corporation (ID 16951) - Paramount*

Anaplex Corporation (Anaplex) operates a metal processing and finishing company in the City of Paramount. The facility processes parts for commercial and defense aerospace applications. The processes include anodizing and plating process lines which use hexavalent chromium, nickel, and cadmium. Additional details regarding the ambient monitoring in Paramount and near Anaplex and events that led up to the designation of Anaplex as a Potentially High Risk Facility are discussed in the 2016 AB2588 Annual Report and on the SCAQMD's website.¹¹

Based on ambient monitoring in December 14, 2016, SCAQMD staff designated Anaplex as a Potentially High Risk Level Facility specifically based on high levels of hexavalent chromium found at monitors adjacent to Anaplex. As part of this designation, Anaplex was required to submit an Early Action Risk Reduction Plan by March 14, 2017, an ATIR by May 16, 2017, a HRA and a RRP by June 13, 2017. Following litigation in Superior Court, the Hearing Board granted a Stipulated Order for Abatement on January 18, 2017.

Anaplex submitted an Early Action Reduction Plan on March 13, 2017. SCAQMD staff provided comments on April 26, 2017 and requested revisions and resubmittal of the Early Action Risk Reduction Plan. Anaplex submitted a revised Early Action Risk Reduction Plan on May 11, 2017 which was conditionally approved on May 31, 2017.

On May 15, 2017, Anaplex submitted an ATIR and a HRA and RRP on June 13, 2017. SCAQMD staff provided written comments regarding all three documents on December 8, 2017, and requested revisions and resubmittal of each document. Staff are currently reviewing all submitted documents.

2.3.5 *Boral Roofing, LLC (ID 1073) – Corona*

Boral Roofing, LLC (Boral Roofing) is a clay and concrete tile manufacturing plant located in the City of Corona. Boral Roofing has two production lines for manufacturing clay roof tiles. Clay is delivered by trucks and then premixed by a skip loader. The clay is then grounded into a fine powder in a mill, screened, and transported to storage silos. Clay is transferred by belt conveyor to their manufacturing process where it is mixed with water and additives in pug mills. The wet clay mixture is extruded to tile form, then dried and fired in various natural gas kilns.

On March 20, 2017, SCAQMD staff sent a letter requesting Boral Roofing to prepare an ATIR due to the facility having a priority score greater than 10 based on its 2015 annual emissions with hexavalent chromium and arsenic as the main air toxics contributing to the high priority score.

The ATIR was submitted on August 25, 2017. Following comments from SCAQMD staff regarding technical discrepancies, Boral Roofing submitted the revised ATIR on November 16, 2017 which included corrections to calculations for hexavalent chromium that resulted in lower emissions. Staff are currently reviewing all submitted documents.

¹¹ <http://www.aqmd.gov/home/news-events/community-investigations/air-monitoring-activities>

2.3.6 *Bowman Plating Company, Inc. (ID 18989) – Unincorporated LA County*

Bowman Plating Company (Bowman), located near the City of Compton, has been in operation since 1945 and provides metal finishing and non-destructive testing, and processes materials including aluminum, titanium, composites, steel, and stainless steel for aerospace, defense, and related industries. Bowman's previously approved HRA from 2007 showed a maximum cancer risk of 14.2 in a million, mainly due to hexavalent chromium emissions from paint spraying operations. Subsequent annual emission reports submitted by Bowman for calendar years 2011 through 2013 showed increased use of hexavalent chromium-containing spray paints and lower control efficiencies, and consequently the 2007 HRA (using 2006 emissions inventory year) was no longer representative of the facility's current health risks. As a result, staff required Bowman to submit an updated HRA using the 2013 emission inventory.

Bowman submitted an HRA using their 2013 emission inventory on October 24, 2014. This HRA was then updated by SCAQMD staff to incorporate the 2015 OEHHA HRA Guidelines resulting in a maximum residential cancer risk of 110 in a million, and 17 in a million for the maximum exposed worker receptor, both primarily from hexavalent chromium emissions. SCAQMD staff approved the HRA on December 11, 2015, and since the cancer risks exceeded the Action Risk Level specified in Rule 1402, Bowman was required to conduct public notification and to submit a RRP. Notices of the public notification meeting were sent out to 118 people in the area where potential health risks were above the health risk levels established in Rule 1402. SCAQMD staff held a public notification meeting at the Corps Community Center to present the results of the HRA on February 9, 2016.

On June 8, 2016, Bowman submitted a RRP based on their approved HRA. SCAQMD staff sent a comment letter on September 15, 2016 and a revised RRP was submitted by Bowman on October 26, 2016. SCAQMD staff reviewed the proposed risk reduction measures, emission calculations, and modeling analysis which projected a potential maximum residential cancer health risk of 5 in one million, once the revised RRP was fully implemented. However, the modeling analysis submitted with the revised RRP did not properly account for the maximum potential hexavalent chromium emissions from the three spray booths based on their permitted emission limits. Adding these emissions increased the total risk from the facility to approximately 17.02 in one million, which is below the Action Risk Level. The revised RRP was conditionally approved on February 10, 2017, noting that sufficient information was not available on fugitive dust emissions and if information regarding fugitive emissions become known to SCAQMD in the future, that would substantially impact health risks to exposed persons, implementation, or effectiveness of the plan, SCAQMD may require the RRP to be updated and resubmitted pursuant to Rule 1402(k)(1). The RRP was fully implemented on March 30, 2017

2.3.7 *Chevron Products Co., El Segundo Refinery (ID 800030) – El Segundo*

Chevron El Segundo Refinery (Chevron ES) is a 1,000 acre petroleum oil refinery in the City of El Segundo with a 290,000 barrels of crude oil per day processing capacity. Chevron ES has approximately 20% of the gasoline market share in Southern California and is one of the largest refineries on the West Coast. The main products of the refinery are transportation fuels, such as gasoline, jet fuel, and diesel fuel.

On October 14, 2016, SCAQMD staff sent a letter requesting Chevron ES to prepare either an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2015 annual

emissions with furans, polycyclic aromatic hydrocarbons, arsenic, cadmium, and related compounds as the main air toxics contributing to the high priority score. Chevron elected to participate in the Voluntary Risk Reduction Program and submitted a VRRP on March 27, 2017 which is currently under review.

2.3.8 *Equilon Enterprises LLC dba Shell Oil Products US (ID 800372) – Carson*

Equilon Enterprises LLC (Equilon) operates a petrochemical product distribution terminal in the City of Carson which is comprised of loading racks, storage tanks, and product pipeline. The products are transported by pipeline, trucks, or rail.

On October 10, 2017, SCAQMD staff sent a letter requesting Equilon to prepare either an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2015 annual emissions with benzene, ethyl benzene, and naphthalene emissions as the main air toxics contributing to the high priority score. Equilon elected to prepare an ATIR which is due on March 9, 2018. Staff are currently reviewing all submitted documents.

2.3.9 *Fontana Paper Mills Inc. (ID 11716) – Fontana*

Fontana Paper Mills Inc. (Fontana Paper Mills) is a manufacturing plant for asphalt roofing material, including shingles and saturated and coated roofing paper underlayments. The facility recycles paper products and manufactures roll stock for shingle backing or underlayments. The emissions from the asphalt mixer, heater and rollcoater are controlled by thermal oxidizer. Other emissions from the saturator process are controlled by a scrubber, followed by a high efficiency air filter. Emissions of polycyclic aromatic hydrocarbons are the main toxic pollutant of concern and can occur when asphalt is heated.

SCAQMD staff noted discrepancies in reported emissions from three asphalt roofing companies and determined that additional investigation was warranted. As a result, on October 14, 2016, SCAQMD staff requested an emissions inventory update from Fontana Paper Mills in order to get a better understanding of actual emissions and corresponding health risks. Because Fontana Paper Mills did not have a previously approved HRA, an ATIR was requested based on its 2014 annual emissions. The ATIR was submitted on March 14, 2017, and the facility proposed source testing of toxic air contaminants at the high efficiency air filter vents. However, since Fontana Paper Mills is currently undergoing modifications in order to be able to manufacture products using polymer asphalt, source testing was postponed until construction for the modified manufacturing line has been completed. Construction should be completed by the end of June 2018.

2.3.10 *Gerdau S.A. / TAMCO (ID 18931) – Rancho Cucamonga*¹²

Gerdau North America (Gerdau) located in the City of Rancho Cucamonga acquired the TAMCO steel mini mill in October 2010. The facility produces steel reinforcing bars that are commonly used in construction. Ferrous steel scrap is recycled and delivered to the facility by trucks and rail, and then melted in an electric arc furnace to produce steel billets. The billets are reheated in a reheat furnace to form concrete reinforcing bar (rebar). The primary pollutants for this facility are hexavalent chromium, nickel, manganese, mercury, and arsenic.

¹² <http://www.aqmd.gov/home/rules-compliance/compliance/toxic-hot-spots-ab-2588/gerdau>

Gerdaud was directed to submit an ATIR and HRA based on significantly high levels of cadmium reported in its 2011 annual emissions reporting. The HRA was approved on October 8, 2015 and based on the 2015 OEHAA HRA Guidelines. Several health risks in the approved HRA exceeded levels specified in Rule 1402 and Gerdaud was therefore required to notify the public regarding the results of its HRA, and also submit a RRP. Notices of the public notification meeting were sent out to 1,523 people in the area where the health risks were above the levels established in Rule 1402. SCAQMD staff held a public notification meeting was held on November 30, 2015 to explain the impact of Gerdaud's emissions on public health and to discuss next steps.

Gerdaud submitted its first RRP on April 5, 2016. After review of the RRP and several meetings with facility representatives, SCAQMD staff provided comments on the RRP and on July 1, 2016, Gerdaud submitted a revised RRP. However, the revised RRP did not account for hexavalent chromium emissions from ladle heaters, billet reheat furnace, and spray chamber stack. SCAQMD staff added these emissions which resulted in a projected potential maximum residential cancer risk of 8.7 in a million. The cancer burden and acute and chronic HI remain below 1 so after making these revisions, SCAQMD staff conditionally approved Gerdaud's RRP on July 5, 2016. The RRP consisted of ten risk reduction measures to be completed by January 5, 2019.

On July 5, 2017, Gerdaud submitted a progress report to update SCAQMD on the status of its risk reduction measures. Seven of the ten measures were implemented and the progress of the remaining three measures was reviewed. SCAQMD staff continues to monitor the progress of the RRP and anticipates all risk reduction measures to be implemented within specified timeframes.

2.3.11 Glendale City, Glendale Water & Power (ID 800327) – Glendale

Glendale Water & Power (GWP) is a municipal power plant owned and operated by the City of Glendale. GWP consists of three utility boilers and eight stationary combustion turbines with a combined 238 MW generation capacity. These units combust natural gas which is supplemented by methane gas from a Class III landfill.

On March 1, 2017, SCAQMD staff sent a letter requesting GWP to prepare either an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2015 annual emissions with dioxins and furans, hexavalent chromium, and arsenic as the main air toxics contributing to the high priority score.

GWP elected to prepare an ATIR and submitted it on July 28, 2017. Staff are currently reviewing all submitted documents.

2.3.12 Griswold Industries (ID 800318) – Costa Mesa

Griswold Industries, Inc., (Griswold) also known as Cla-Val Co. is a 20-acre production/foundry complex located in the City of Costa Mesa. Griswold manufactures automatic control valves and electronic products for waterworks, fire protection, aviation ground fueling, and marine and industrial customers. Potential air toxic emission sources include natural gas combustion; furnaces; abrasive blasting; sand handling, mixing, and reclamation; metal grinding; metal cutting; and metal coating. Potential health risks from Griswold are primarily from hexavalent chromium emissions related to foundry operations. On February 10, 2016, SCAQMD staff required Griswold to prepare and submit an ATIR based on its 2014 annual emissions. SCAQMD staff conducted a site visit to verify the emission sources and to identify potential sources of fugitive emissions. Griswold

submitted an ATIR on December 23, 2016. Revisions to the ATIR followed on August 30, 2017 and on September 21, 2017 to correct certain parameters. After reviewing the ATIR and the preliminary HRA information, SCAQMD staff concluded that the health risks were below the Notification Risk Level in Rule 1402. On October 27, 2017, Griswold was notified that no further action was required.

2.3.13 GS II, Inc. (ID 183567) – Wilmington

GS II, Inc. (GS II), located in the City of Wilmington, manufactures asphalt roof shingles. The manufacturing process at the facility includes asphalt storage tanks, asphalt heaters, roll coaters and saturators and are primary emission sources.

As described previously, due to discrepancies in reported emissions from three asphalt roofing companies, on October 28, 2016, SCAQMD staff sent a letter requesting GS II to prepare either an ATIR or a VRRP in order to get a better understanding of actual emissions and corresponding health risk. On November 14, 2016, GS II staff informed SCAQMD staff of their intention to participate in the Voluntary Risk Reduction Program. However, GS II informed SCAQMD staff on November 1, 2017 that the company wanted to opt out of the Voluntary Risk Reduction Program. As a result, on November 1, 2017 SCAQMD staff terminated GS II's participation in the Voluntary Risk Reduction Program and notified GS II that an ATIR and HRA was due within 90 days of the notification letter. Staff are currently reviewing all submitted documents.

2.3.14 Hixson Metal Finishing (ID 11818) - Newport Beach ¹³

Hixson Metal Finishing (Hixson) located in the City of Newport Beach, is a metal finishing facility that conducts anodizing, testing, plating, coating, and painting operations on various parts for use in the aerospace and defense industries. Some of the potential onsite sources of emissions include the chrome anodizing line, nickel and cadmium plating, curing and drying ovens, paint spray booths, abrasive blasting equipment, wastewater treatment system and miscellaneous natural gas combustion sources. The major source of concern with Hixson's operation is fugitive dust containing hexavalent chromium. On April 3, 2014, SCAQMD staff required Hixson to prepare and submit a HRA and a RRP, in conjunction with a Stipulated Order for Abatement approved by SCAQMD's Hearing Board that limited Hixson's activities, and required shutdown of certain operations using hexavalent chromium if monitored ambient levels exceeded specified hexavalent chromium levels.

Hixson submitted their HRA to SCAQMD on November 13, 2014. Upon detailed review and use of the 2015 OEHHA HRA Guidelines, SCAQMD staff finalized the submitted HRA on May 8, 2015. The approved HRA found a maximum residential cancer risk of 1,502 per million mainly from hexavalent chromium emissions. The estimated cancer risk was based on emissions occurring before the facility instituted various control measures and today's level of risk is substantially lower. Since the HRA results were above the Significant Risk Level in Rule 1402, Hixson was required to notify the public about the health risk in addition to conducting annual public notification meetings until the Rule 1402 Action Risk Level was achieved pursuant to Rule 1402(p). Notice of the public notification meeting was sent out to over 7,300 people in the area of

¹³ <http://www.aqmd.gov/home/regulations/compliance/toxic-hot-spots-ab-2588/hixson-metal-finishing>

impact. SCAQMD staff held a public notification meeting at the Hoag Conference Center on June 18, 2015.

Hixson submitted its first RRP on March 2, 2015. On May 8, 2015, SCAQMD staff rejected Hixson's first RRP and required resubmittal. Hixson subsequently submitted a second RRP on June 5, 2015. On June 26, 2015, SCAQMD staff rejected Hixson's second RRP due to its failure to demonstrate that the proposed controls reduce risks below Rule 1402 thresholds. Hixson resubmitted a revised RRP on July 1, 2015, and SCAQMD staff conditionally approved it on July 24, 2015. The associated permits to construct implementing the RRP were approved on December 11, 2015 and a second public notification meeting was held on February 11, 2016 at the Hoag Conference Center to inform interested parties regarding the key activities surrounding the RRP. In the 2016 Annual Report for the AB 2588 Program, staff incorrectly stated that the RRP was fully implemented as of December 31, 2016. The Order for Abatement expired on December 31, 2016, as Hixson had constructed all the measures contained in the RRP. However, one of the risk reduction measures requires all emissions from Building 2 to be captured and routed through a dry scrubber followed by ULPA filters. The existing chromic acid anodizing tank (Tank 70) is located in Building 2 and currently has a control system that includes an ULPA filtration system. As part of the modifications to Building 2, existing Tank 70 is being replaced with a new chromic acid anodizing tank (also designated Tank 70) vented to the new Building 2 control system, which also includes ULPA filtration. However, there was an issue with the temperature controls for the new Tank 70, which has delayed its operation. Since the existing Tank 70 is already being controlled by an ULPA filtration system, there are no additional emissions expected from the continued operation of existing Tank 70 compared to new Tank 70, as proposed in the RRP. It is anticipated that new Tank 70 will be operational in 2018. Ambient monitoring for hexavalent chromium continues in the vicinity of Hixson.

2.3.15 Hyperion Water Reclamation Plant, City of Los Angeles Bureau of Sanitation (ID 800214) – Playa del Rey

The City of Los Angeles owns and operates the Hyperion Water Reclamation Plant (Hyperion) in the Playa del Rey community. Hyperion is a publically owned wastewater treatment plant with over 275 million gallon capacity with primary and full secondary treatment processes. As part of the treatment process, more than 885,000 pounds of solid and organic materials are removed daily and treated through anaerobic digestion.

On October 28, 2016, SCAQMD staff sent a letter requesting Hyperion to prepare either an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2015 annual emissions with perchloroethylene and arsenic as the main air toxics contributing to the high priority score.

On November 23, 2016, Hyperion elected to participate in the Voluntary Risk Reduction Program and submitted a VRRP on January 24, 2017. Staff are currently reviewing all submitted documents.

2.3.16 Kaiser Aluminum Fabricated Products, LLC (ID 16338) – Los Angeles

Kaiser Aluminum Fabricated Products located in the City of Los Angeles, develops fabricated aluminum products for major suppliers and manufacturers in the aerospace, general automotive, engineering and custom industrial markets. They also manufacture aluminum extrusions, cast logs, billets, and semi-fabricated products. The facility was required to prepare and submit an ATIR

based on its 2010 annual emissions. SCAQMD staff conducted a site visit in October 2014 to verify the sources of emissions identified in the ATIR. After obtaining approval of the source test results, staff recalculated a new priority score below 10 and provided final approval of the ATIR on September 19, 2017.

2.3.17 LA City Bureau of Street Maintenance (ID 116480) – Los Angeles

The Los Angeles City Bureau of Street Maintenance (Bureau) operates an asphalt batch plant on Olympic Boulevard in Los Angeles. The asphalt is used to maintain 6,500 centerline miles of public roadways and 800 centerline miles of alleys within the city. The plant recycles asphalt concrete and consists of crushers, natural gas-fired rotary dryers and storage silos. Particulate emissions are controlled by baghouses and misters.

On May 31, 2017, SCAQMD staff sent a letter requesting its Bureau to prepare an ATIR due to the facility having a priority score greater than 10 based on its 2015 annual emissions with polycyclic aromatic hydrocarbons as the main air toxics contributing to the high priority score. Bureau staff subsequently provided information that the asphalt batch plant was undergoing major renovations and would not operate in any capacity for the majority of 2018 calendar year. The shutdown of the facility also occurred prior to the date SCAQMD staff notified the Bureau to prepare an ATIR. Based on the information, SCAQMD staff notified the Bureau on July 14, 2017 that no further action was needed at this time but that the emissions from the Bureau's facility would be evaluated at the next quadriennial reporting year, which will be after renovations are completed.

2.3.18 Lubeco, Inc. (ID 41229) – Long Beach

Lubeco, Inc. (Lubeco) is a metal finishing company operating in Long Beach near the southern border of the City of Paramount. Lubeco's primary operations involve painting, surface preparation, anodizing, sealing and coating of metals for the aerospace industry. Ancillary operations include abrasive blasting, wastewater treatment, and operation of a natural gas-fired boiler and ovens.

Lubeco utilizes baking and drying ovens, spray booths, tanks for chromic acid anodizing, aqueous solutions, and acid surface preparations. These processes can potentially generate hexavalent chromium emissions.

Beginning in October 2016, through expanded monitoring efforts in the City of Paramount, SCAQMD staff found high concentrations of hexavalent chromium in the vicinity of Lubeco. As a result, Lubeco was selected as a host facility for testing of hexavalent chromium emissions from a heated sodium dichromate seal tank due to elevated ambient monitoring readings in the nearby south Paramount area. On April 27, 2017, SCAQMD staff conducted source tests for hexavalent chromium emissions from a heated sodium dichromate seal tank at Lubeco with the main objective of determining an emission factor that can be used for calculating emissions from heated sodium dichromate seal tanks used in plating operations. The results of the source tests showed the heated sodium dichromate tank to be a source of hexavalent chromium. The second objective of this testing was to identify potential sources of hexavalent chromium emissions as measured by SCAQMD ambient air monitors in the nearby south Paramount area. SCAQMD subsequently filed a petition for Order for Abatement with the Hearing Board. Following the hearings on August 17 and August 23, 2017, the Hearing Board granted SCAQMD permission to install ambient monitors

and a meteorological station on the facility property and permission to conduct additional source tests.

Because of the ambient measurements, SCAQMD staff notified Lubeco on September 8, 2017 that the facility may be designated as a Potentially High Risk Level Facility. Lubeco representatives and SCAQMD staff met on September 22, 2017 to discuss the monitoring results that had led to the notification. On September 28, 2017, Lubeco was officially designated as a Potentially High Risk Level Facility. As part of this designation, Lubeco was required to expeditiously reduce risks and to submit an Early Action Reduction Plan by December 27, 2017, an ATIR by February 27, 2018, a HRA and a RRP by March 27, 2018. The Early Risk Reduction Plan was submitted on December 8, 2017. Staff are currently reviewing all submitted documents.

2.3.19 Matrix Oil Corporation (ID 182970) – La Habra Heights

Matrix Oil Corporation (Matrix) is a private oil and natural gas production company operating an oil production site in La Habra Heights. This site consists of 17 total active crude oil producing wells generating approximately 400 barrels per day of crude oil. This site also produces roughly 400,000 cubic feet of field gas daily. Matrix operates five microturbines to power the site.

On June 30, 2017, SCAQMD staff sent a letter requesting Matrix to prepare an ATIR due to the facility having a priority score greater than 10 based on its 2015 annual emissions with polycyclic aromatic hydrocarbons being the main air toxics contributing to the high priority score. Matrix submitted their ATIR on August 1, 2017. During the review process, SCAQMD staff noticed that an incorrect emission factor for microturbines was used by the facility resulting in lower emissions compared to what was reported. After emission revisions were submitted by the facility, SCAQMD staff recalculated a new priority score below 10. On October 10, 2017, SCAQMD staff sent a letter informing Matrix of the revised priority score and that no further action was required in response to the original notice.

2.3.20 MM West Covina LLC (ID 113873) – West Covina

MM West Covina is a cogeneration facility located on the BKK Landfill in the City of West Covina. Landfill gas from the inactive BKK Landfill, which received Class I and Class III waste, is combusted in the facility's steam generator. The steam powers a 7,100 kW capacity steam turbine to produce electricity.

On January 11, 2017, SCAQMD staff sent a letter requesting MM West Covina to prepare either an ATIR or a VRRP due to the facility having a priority score greater than 10 based on 2014 annual emissions with dioxins and hexavalent chromium being the main air toxic contributors to the high priority score.

On February 15, 2017, MM West Covina elected to prepare an ATIR. The ATIR was submitted on June 13, 2017. SCAQMD staff provided comments on August 17, 2017 requiring revisions to the ATIR which was provided on August 29, 2017. SCAQMD staff approved the ATIR on March 27, 2018, and notified the facility to prepare and submit a HRA by June 26, 2018.

2.3.21 Orange County Sanitation District, Fountain Valley (Plant No. 1) (ID 17301) – Fountain Valley

The Orange County Sanitation District (OCSD) is a public agency that provides wastewater collection, treatment, and reclamation services in central and northwest Orange County. Plant No. 1, located in Fountain Valley, is one of the two wastewater treatment plants operated by OCSD. Plant No. 1 treats wastewater from residential, commercial and industrial sources using advanced primary and secondary treatment.

On April 28, 2017, SCAQMD staff sent a letter requesting OCSD Plant No. 1, to prepare either an ATIR or a VRRP due to the facility having a priority score greater than 10 based on 2015 annual emissions with formaldehyde being the main air toxic contributor to the high priority score. Formaldehyde emissions were from three cogeneration engines combusting primarily digester and supplemental natural gas. Digester gas is produced at the facility through anaerobic digestion, which is part of the solids processing facilities.

OCSD elected to participate in the Voluntary Risk Reduction Program, and submitted the VRRP on September 25, 2017. The plan focused on installation of oxidation catalysts on the exhaust of the three engines, which serves to reduce formaldehyde emissions and emissions of nitrogen oxides. The oxidation catalyst system was previously planned and fully permitted on February 28, 2017. Staff are currently reviewing all submitted documents.

2.3.22 Orange County Sanitation District, Huntington Beach (Plant No. 2) (ID29110) – Huntington Beach

The Orange County Sanitation District (OCSD) is a public agency that provides wastewater collection, treatment, and reclamation services in central and northwest Orange County. Plant No. 2, located in Huntington Beach, is one of the two wastewater treatment plants operated by OCSD. Plant No. 2 treats wastewater from residential, commercial and industrial sources using advanced primary and secondary treatment.

On April 28, 2017, SCAQMD staff sent a letter requesting OCSD Plant No. 2 to prepare either an ATIR or a VRRP due to the facility having a priority score greater than 10 based on 2015 annual emissions with formaldehyde being the main air toxic contributor to the high priority score. Formaldehyde emissions were from three cogeneration engines combusting primarily digester and supplemental natural gas. Digester gas is produced at the facility through anaerobic digestion, which is part of the solids processing facilities.

OCSD elected to participate in the Voluntary Risk Reduction Program, and submitted the VRRP on September 25, 2017. The plan focused on the installation of oxidation catalysts on the exhaust of the three engines, which serves to reduce formaldehyde emissions and emissions of nitrogen oxides. The oxidation catalyst system was previously planned and fully permitted on February 28, 2017. Staff are currently reviewing all submitted documents.

2.3.23 Phillips 66 Company, Los Angeles Refinery (ID 171109) - Carson

The Phillips 66 Company operates two linked facilities, five miles apart, in Carson and Wilmington. The Phillips 66 Carson Refinery (Carson Refinery) was built in 1923 and is situated on approximately 235 acres. The refinery processes mainly heavy, high-sulfur crude oil, which is received by pipeline and at a terminal in the Port of Long Beach. The Carson Refinery produces

intermediate product, which is then sent to the Phillips 66 Wilmington Refinery for further processing to produce petroleum fuels and fuel-grade petroleum coke. These facilities have fluid catalytic cracking, alkylation, hydrocracking, coking and naphtha reforming units.

On March 1, 2017, SCAQMD staff sent a letter requesting Carson Refinery to prepare either an ATIR or a VRRP due to the facility having a priority score greater than 10 based on 2015 annual emissions with arsenic and sulfuric acid being the main contributors to the high priority score. These emissions were mainly from crude distillation, hydro-treating, and steam generation processes at the facility.

Carson Refinery elected to participate in the Voluntary Risk Reduction Program, and submitted the VRRP on August 1, 2017. Following review, SCAQMD staff noted several deficiencies. Revisions and clarifications were provided by Carson Refinery staff on September 17, November 7, and November 22, 2017 to address the deficiencies. Staff are currently reviewing all submitted documents.

2.3.24 Phillips 66 Company, Los Angeles Refinery – Wilmington Plant (ID 171107) – Wilmington

The Phillips 66 Company operates two linked facilities, five miles apart, in Carson and Wilmington. The Phillips 66 Wilmington Refinery (Wilmington Refinery) was built in 1919 and is situated on approximately 424 acres. As described previously, this facility receives and processes intermediate product from the Carson facility and produces petroleum fuels as well as fuel-grade petroleum coke. Air toxic emissions are generated from fluid catalytic cracking, steam generation, electricity generation, and sulfuric acid production processes.

On March 1, 2017, SCAQMD staff sent a letter requesting Wilmington Refinery to prepare either an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2015 annual emissions with hexavalent chromium and polycyclic aromatic hydrocarbons being the main air toxic contributors to the high priority score.

Wilmington Refinery elected to prepare an ATIR, and submitted the ATIR on August 1, 2017. Following review, SCAQMD staff found several deficiencies. Revisions were submitted by Wilmington Refinery staff on November 10, and December 15, 2017. Staff are currently reviewing all submitted documents.

2.3.25 Quemetco (ID 8547) – City of Industry¹⁴

Quemetco operates a battery recycling and lead recovery facility in the City of Industry. At this facility, used batteries are received, fragmented, and the lead-containing materials are recovered and purified. The primary pollutants for this facility are arsenic, lead, benzene, and 1,3-butadiene.

Multiple AB 2588 HRAs have been approved for Quemetco in the past, most recently in 2010. In October and November 2013, SCAQMD staff conducted source tests at Quemetco. The results of the 2013 source tests showed elevated arsenic, benzene, and 1,3-butadiene emissions compared to previous 2009, 2010, and 2012 source tests. As a result, on December 10, 2013, SCAQMD staff requested that Quemetco prepare and submit an HRA pursuant to Rule 1402. Quemetco submitted

¹⁴ <http://www.aqmd.gov/home/regulations/compliance/toxic-hot-spots-ab-2588/quemetco>

an HRA on May 9, 2014. SCAQMD staff sent a comment letter on September 23, 2014 requiring Quemetco to revise their HRA in several areas including an assessment of potential lead impacts relative to the National Ambient Air Quality Standard, and to address minor comments from the Office of Environmental Health Hazard Assessment (OEHHA). Quemetco provided an updated HRA in January 2015. SCAQMD staff requested that Quemetco prepare a new HRA to include two scenarios: 1) a baseline scenario utilizing the November 2013 SCAQMD source test input into the dispersion model, and 2) dispersion modeling that reconciled any potential differences between onsite fence-line monitoring data that became available in 2014 and source tests also available from 2014. Quemetco provided an updated HRA in May 2015. On September 16, 2015, SCAQMD sent Quemetco a tentative approval of the staff-modified revised HRA. Quemetco commented that the monitoring data collected onsite required revision before incorporating into the HRA. SCAQMD staff evaluated Quemetco's monitoring data in late 2015 and early 2016. Onsite fence-line monitoring data was corrected for pre-existing arsenic on blank filters and the dispersion modeling source parameters were also adjusted.

Additionally, in 2014, SCAQMD staff initiated a technology demonstration pilot study for in-stack continuous emissions monitoring system (CEMS) and fence-line/perimeter ambient air monitoring for multi-metals. Contracts with Cooper Environmental Services, the only manufacturer of these types of continuous monitors, were initiated to implement the study. The pilot study was conducted at Quemetco and Gerdau in 2015. Preliminary findings from 2015 for ambient multi-metal monitor showed favorable results for lead and less quantitative results for other metals, but most results were useful for trend detection. Quemetco purchased the in-stack CEMS.

SCAQMD staff approved the HRA on May 17, 2016 with some revisions. The approved HRA showed that the residential cancer health risk was 16 in one million, the worker chronic HI was 1.28, and the cancer burden was 2.0. These values exceeded the Action Risk Level of Rule 1402 and public notification and a RRP were required. Notice of the public meeting was sent to approximately 8,000 residents and businesses within the public notification area. A public notification meeting was held on June 23, 2016 at La Puente High School.

Quemetco submitted an RRP on November 16, 2016. As part of the RRP, Quemetco proposed using in-stack multi-metals CEMS to ensure that Rule 1402 risk thresholds are not exceeded. Quemetco's RRP was conditionally approved on June 22, 2017. The conditions for approval were all related to operation of the CEMS.

In addition, Quemetco has requested a permit modification to allow a 25% increase in their daily throughput. SCAQMD staff is processing this permit request, and is also preparing an Environmental Impact Report (EIR) as required by the California Environmental Quality Act (CEQA). The EIR will evaluate the potential environmental impacts of this proposed permit modification and will include an analysis of the health risks associated with the throughput increase. There will be multiple opportunities for the public to provide input on the EIR. The Final EIR will include responses to all comments received and must be certified before the permit modification request can be considered for approval.

2.3.26 Southern California Gas Company, Playa del Rey Storage Facility (ID 8582) – Playa del Rey

Southern California Gas Company (SoCal Gas) is a public utilities company that owns and operates a natural gas storage facility in the Playa del Rey community in the City of Los Angeles. Natural gas is compressed and stored in underground reservoirs. There are transmission pipelines for distributing natural gas from the facility. Primary devices at the facility include three natural gas internal combustion engines driving air compressors.

On May 31, 2017, SCAQMD staff sent a letter requesting SoCal Gas to prepare an ATIR due to the facility having a priority score greater than 10 based on its 2015 annual emissions with formaldehyde, 1,3-butadiene and benzene being the main air toxic contributors to the high priority score. On October 31, 2017, the ATIR was submitted. Staff are currently reviewing all submitted documents.

2.3.27 California Resources Corporation / SoCal Holding, LLC (ID 169754) – Huntington Beach

SoCal Holding, LLC (SoCal Holding) is a subsidiary of California Resources Corporation, an oil and natural gas exploration and production company. SoCal Holding leases and operates oil production wells, mainly in Huntington Beach with some wells located offshore on a platform approximately 1.5 miles from shore. Recovered field gas is either sold to AES Huntington Beach, combusted in micro-turbines or flared. The liquid product is stored in tanks linked to truck loading or pipeline.

On October 11, 2017, SCAQMD sent a letter requesting SoCal Holding to prepare an ATIR due to the facility having a priority score greater than 10 based on 2015 annual emissions with polycyclic aromatic hydrocarbons and benzene being the main air toxic contributors to the high priority score. The source for polycyclic aromatic hydrocarbons emissions was a flare located on a leased property northwest of the intersection of Goldenwest Street and Pacific Coast Highway. Benzene emissions were reported as fugitive leaks throughout the facility. Staff are currently reviewing all submitted documents.

2.3.28 Tesoro Refining & Marketing Co., LLC, Calciner (ID 174591) – Wilmington

Tesoro Calciner produces calcined petroleum coke, or raw or “green” petroleum coke heated to high temperatures so that volatile hydrocarbon compounds and excess moisture are heated out of the coke. Equipment in Tesoro Calciner’s operations include a rotary kiln, baghouses, conveyor belts, receiver and separator vessels, an afterburner, surge bins, boiler, bucket elevators, loading and unloading stations, shakers, and storage silos.

On April 28, 2017, SCAQMD staff sent a letter requesting Tesoro Calciner to either prepare an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2016 annual emissions with sulfuric acid, arsenic, manganese, and nickel as the main air toxic contributors to the high priority score. On May 25, 2017, Tesoro Calciner elected to participate in the Voluntary Risk Reduction Program, and subsequently submitted the VRRP on September 21, 2017.

After review of the VRRP, SCAQMD staff found several deficiencies and on January 31, 2018, a letter requesting revision and resubmittal of the VRRP was sent. SCAQMD staff is currently waiting for the necessary revisions to be submitted before continuing the review of the VRRP.

2.3.29 Tesoro Refining & Marketing Co., LLC, Los Angeles Refinery (ID 174655, 800436, 174694, 174703) – Carson and Wilmington

The Tesoro Los Angeles Refinery (Tesoro Refinery) is located along the city border between the cities of Carson and Wilmington in south Los Angeles County. The Tesoro Refinery was originally two adjacent but not contiguous refineries but has been undergoing consolidation through the Los Angeles Refinery Integration and Compliance (LARIC) Project.¹⁵ The Tesoro Refinery will be comprised of approximately 930 acres with a processing capacity of approximately 380,000 barrels per day. In 2017, the Tesoro Corporation underwent a name change to Andeavor.

On December 22, 2016, SCAQMD staff sent a letter requesting Tesoro Refinery to either prepare an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2015 annual emissions with polycyclic aromatic hydrocarbons, hexavalent chromium, arsenic, naphthalene, benzene, and cadmium as the main air toxic contributors to the high priority score.

Tesoro Refinery elected to participate in the Voluntary Risk Reduction Program, and submitted their VRRP on May 23, 2017. After initial review, SCAQMD staff required Tesoro Refinery to make several revisions. Both SCAQMD staff and Tesoro representatives have met several times regarding the revisions and risk reduction measures proposed. SCAQMD staff is currently waiting for the necessary revisions to be submitted before continuing the review of the VRRP.

2.3.30 Tesoro Sulfur Recovery Plant (ID 151798) – Carson

Tesoro Sulfur Recovery Plant is located in Carson east of the Tesoro Los Angeles Refinery. The facility supports petroleum refinery operations by utilizing the Claus process to recover sulfur in the form of hydrogen sulfide from the byproduct gases of refining crude oil. The facility operates boilers, incinerators, condensers, absorbers, storage tanks, sumps, and sulfur pits.

On December 22, 2016, SCAQMD staff sent a letter requesting the Tesoro Sulfur Recovery Plant to either prepare an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2015 annual emissions with arsenic, polycyclic aromatic hydrocarbons, hexavalent chromium, and formaldehyde as the main air toxic contributors to the high priority score.

The Tesoro Sulfur Recovery Plant elected to participate in the Voluntary Risk Reduction Program, and submitted the VRRP on May 23, 2017. After review, on February 15, 2018, SCAQMD staff sent a letter requesting revisions and resubmittal of the VRRP. SCAQMD staff is currently waiting for the necessary revisions to be submitted before continuing review of the VRRP.

2.3.31 Torrance Refining Company LLC (ID 181667) – Torrance

Torrance Refining Company LLC (Torrance Refining) is a subsidiary of PBF Energy, an independent petroleum refiner and supplier of unbranded transportation fuels, heating oils, petrochemical feedstocks, lubricants, and other petroleum products. The Torrance Refinery sits on 750 acres in the City of Torrance and has a 155,000 barrels per day of crude oil processing capacity. The refinery produces various petroleum productions along with coke, and sulfur.

¹⁵ www.aqmd.gov/docs/default-source/ceqa/documents/permit-projects/2017/tesorolaric/tesoro_feir.pdf

On January 11, 2017, SCAQMD staff sent a letter requesting Torrance Refining to either prepare an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2015 annual emissions polycyclic aromatic hydrocarbons, arsenic, benzene, and cadmium being the main air toxic contributors to the high priority score.

Torrance Refining elected to participate in the Voluntary Risk Reduction Program and was to submit the VRRP on August 24, 2017 for the 2015 inventory year. However, due to the fact that an explosion had occurred at the facility's fluid catalytic cracking unit during 2015, the facility had limited operations during that year, and SCAQMD staff decided that 2016 would be more representative of facility's routine operations and, as a result, required Torrance Refining to use 2016 as the inventory year for their VRRP.

The facility submitted the VRRP on August 24, 2017. After review, on October 19, 2017, SCAQMD staff sent a comment letter requesting revisions and resubmittal of the VRRP. The revised VRRP was received on November 2, 2017. However, information regarding risk reduction measures and the implementation schedules required more revisions. Subsequently, on November 28, 2017, Torrance Refining Company submitted additional revised VRRP files, which is currently under review.

2.3.32 Triumph Processing, Inc. (ID 800267) – Lynwood

Triumph Processing, Inc. (Triumph) owns and operates a metal treating and finishing facility in the City of Lynwood. Triumph treats aluminum and titanium parts for the aerospace industry by using anodizing, plating and painting operations.

On May 31, 2017, SCAQMD staff sent a letter requesting Triumph to either prepare an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2014 annual emissions with methylene phenyl diisocyanates being the main air toxic contributor to the high priority score. Methylene phenyl diisocyanates emissions were due to coating operation in the spray booths.

Triumph elected to prepare an ATIR, which was submitted on October 30, 2017. As part of the ATIR submittal, Triumph staff audited the reported emissions and discovered that they had misreported the quantities of isocyanates and diisocyanates. This information, along with the submitted ATIR, is currently under review.

2.3.33 University of California, Irvine (ID 800288) – Irvine

The University of California, Irvine (UCI) is a public research university located in the City of Irvine. On March 30, 2017, SCAQMD sent a letter requesting UCI to either prepare an ATIR or a VRRP due to the facility having a priority score greater than 10 based on 2015 annual emissions with polycyclic aromatic hydrocarbons emissions as the main contributor to the high priority score. Polycyclic aromatic hydrocarbons emissions were mainly from the gas turbine powering the cogeneration unit at the university.

UCI elected to prepare an ATIR which was submitted on August 29, 2017. Following review, SCAQMD staff revised the priority score with updated distances between the cogeneration unit and the nearest receptors. The revised priority score was calculated to be less than 10 and SCAQMD staff notified UCI on September 20, 2017 that no further action was required in response to the original notification.

2.3.34 Ultramar Refining Company (ID 800026) – Wilmington

Ultramar Refining Company (Ultramar) is a subsidiary of Valero Energy Corporation and operates a 135,000 barrel per day crude oil processing capacity petroleum refinery facility in Wilmington.

On March 29, 2017, SCAQMD staff sent a letter requesting Ultramar to either prepare an ATIR or a VRRP due to the facility having a priority score greater than 10 based on 2015 annual emissions with polycyclic aromatic hydrocarbons emissions as the main air toxic contributor to the high priority score.

Ultramar elected to participate in the Voluntary Risk Reduction Program and submitted the VRRP on August 25, 2017. After review by SCAQMD staff, items were found to be missing, which included throughput data, emission factors, calculation basis, and certain devices and device descriptions. Ultramar subsequently provided the missing information on September 15 and October 26, 2017. Ultramar provided information on emission factor reference sources on February 26, 2018. SCAQMD staff is currently reviewing the VRRP and accompanying revisions.

2.3.35 Universal City Studios, LLC (ID 800202) – Universal City

Universal City Studios, LLC (Universal) is an amusement park and a motion picture/television studio located in Universal City. The facility uses a number of spray booths to apply coatings for park operations.

On June 30, 2017, SCAQMD staff sent a letter requesting Universal to either prepare an ATIR or a VRRP due to the facility having a priority score greater than 10 based on 2015 annual emissions with isocyanate and diisocyanate emissions as the main contributor to the high priority score. Universal informed SCAQMD staff that some elements of the 2015 emissions report required corrections and clarifications. Universal provided evidence showing the usage of certain coatings containing isocyanates in spray booths were over-reported and that none of the isocyanates and diisocyanates reported contained toluene diisocyanates. Substantiating information for correction to the emissions report were provided to SCAQMD staff on August 4 and August 24, 2017. SCAQMD staff reviewed and approved the amendments to the emissions report and the resulting priority score was calculated to be below 10. SCAQMD informed Universal on September 29, 2017 that no further action was required based on the original notification request.

2.6 Rule 1401 Permitting and HRA Modeling Projects

Under Rule 1401, any new, relocated, or modified permit units which emit toxic air contaminants as specified in the rule are subject to specific allowable limits for maximum individual cancer risk (MICR), cancer burden, and non-cancer acute and chronic HI. In 2017, SCAQMD staff processed approximately 2,100 Rule 1401 permit applications for 1,300 facilities. Under Rule 1401, SCAQMD staff reviews new and modified permit applications to ensure that the health risk levels are not exceeded. Staff also provides review and verification of air quality and HRA analyses for Hearing Board cases. In 2017, SCAQMD staff reviewed and approved 20 HRAs for permit applications.

2.7 Rule 1420.2 Modeling Projects

Rule 1420.2 – Emission Standards for Lead from Metal Melting Facilities, was adopted on October 2, 2015 to protect public health by minimizing public exposure to lead emissions and preventing

exceedances of the NAAQS for lead in the Basin. The rule established ambient lead monitoring requirements, stricter ambient lead thresholds, enclosure requirements, and more comprehensive housekeeping provisions for lead-acid battery manufacturers, secondary smelters, scrap recyclers, and an iron and steel mini-mill. Under this rule, air dispersion modeling is used to find the appropriate location for placement of the ambient air monitors. In 2017, SCAQMD staff reviewed dispersion modeling for four facilities under Rule 1420.2, which concluded the compliance determination efforts started in 2016. Table 2 shows the facilities evaluated under this rule.

Table 3 – Rule 1420.2 Facilities with Dispersion Modeling Review

Facility Name	ID #
P. Kay Metal , Inc.	72937
Teledyne Battery Products	173302
Industrial Battery Engineering, Inc.	3277
Senior Aerospace, SSP	105598

2.8 Rules Adopted or Amended in 2017

2.8.1 Adopted Rule 1430 – Control of Emissions from Grinding Operations at Metal Forging Facilities (March 2017)

Rule 1430 was adopted with the objective of reducing toxic emissions, particulate matter emissions, and odors from metal grinding and cutting operations at metal forging facilities. Prior to this rule, these activities were exempt from SCAQMD permitting and were unregulated. Air monitoring and sampling has shown metal particulates, which may contain toxic air contaminants such as nickel and cadmium, are generated by metal grinding and cutting operations. Rule 1430 prohibits metal grinding and cutting operations in the open and includes requirements to vent metal grinding and cutting operations to emission control devices, to meet a specified emission standard for the emission control devices, conduct metal grinding and cutting operations in a building enclosure, and housekeeping measures to further reduce fugitive emissions.

2.8.2 Adopted Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants (July 2017)

Rule 1466 established requirements to minimize fugitive particulate matter emissions from earth-moving activities at sites determined by U.S. EPA, California Department of Toxic Substances Control, State Water Resources Control Board, or Regional Water Quality Control Board to contain soil with arsenic, asbestos, cadmium, hexavalent chromium, lead, mercury, nickel, or polychlorinated biphenyls. The Executive Officer can also identify sites that would be applicable to Rule 1466 based on specified criteria. The rule requires monitoring of ambient PM10 levels, and dust control measures such as fencing and wetting of soil and use of chemical stabilizers. Notification to SCAQMD is required when earth-moving activities are occurring and when PM10 levels are exceeded, along with signage and recordkeeping requirements. The Resolution directed staff to return to the Governing Board no later than February 2018, with an amendment for the

Board's consideration to expand the list of applicable toxic air contaminants to include pesticides, herbicides, other metals, persistent bioaccumulative toxics, and semivolatile organic compounds.

2.8.3 Amended Rule 1401 – New Source Review of Toxic Air Contaminants (September 2017)

In June 2015, Rule 1401 was amended to incorporate the 2015 OEHHA Health Risk Assessment Guidelines (2015 OEHHA HRA Guidelines). The amendments allowed spray booths and retail gasoline dispensing facilities to continue the use of the previous guidelines to allow staff additional time to better understand potential permitting impacts. Based on analysis of SCAQMD permits, implementation of the 2015 OEHHA HRA Guidelines to have minimal impacts to new or modified spray booths or gasoline dispensing facilities. Amended Rule 1401 required that these two source categories begin using SCAQMD's Risk Assessment Procedures (Version 8.1) which incorporate the 2015 OEHHA HRA Guidelines for spray booths and gasoline dispensing facilities, revised emission factors and speciation profiles for gasoline dispensing facilities, and updated meteorological data. The amendments also updated the list of toxic air contaminants to be consistent with OEHHA.

2.8.4 Amended Rule 1420 – Emissions Standard for Lead (December 2017)

The amendments to Rule 1420 further protect public health from exposure to lead from facilities not covered under Rules 1420.1 and 1420.2, and help ensure continued attainment of the NAAQS for lead. The amendments include an initial ambient air lead concentration limit of 0.150 $\mu\text{g}/\text{m}^3$ averaged over any consecutive 30 days, which will be lowered to a final limit of 0.100 $\mu\text{g}/\text{m}^3$ by 2021 to be consistent with Rules 1420.1 and 1420.2. The rule also establishes requirements for building enclosures, revisions to the point source lead emission limits, periodic source testing, conditional ambient air monitoring, and enhanced housekeeping measures.

2.8.5 Amended Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants (December 2017)

Rule 1466 was adopted on July 7, 2017 to control fugitive particulate matter emissions from soils with toxic air contaminants. During the adoption of Rule 1466, the Governing Board directed staff to expand the list of applicable toxic air contaminants to include pesticides, herbicides, other metals, persistent bioaccumulative toxics, and semi-volatile organic compounds. The amendment also expands the applicability of Rule 1466 to other government designated sites and provides for alternative compliance and clarified certain provisions.

2.9 Toxic Program Impacts with New or Revised Toxic Air Contaminants

Pursuant to Rule 1402, once OEHHA finalizes the identification of a new toxic air contaminant or revises a risk value for an existing toxic air contaminant, SCAQMD staff provides notice to the Governing Board and affected industries annually through the AB2588 Annual Report. This report also includes a preliminary estimate of Rule 1402 program impacts. Rule 1401 includes additional requirements for reporting to the Governing Board on permitting impacts.

OEHHA proposed changes to two Reference Exposure Levels (RELs) in 2017; one for Hexamethylene Diisocyanate (HDI) - CAS#822060, and the other for toluene - CAS#108883¹⁶. RELs are airborne concentration levels of a chemical that are anticipated to result in adverse non-cancer health effects for specified exposure durations in the general population, including sensitive subpopulations, when exceeded. RELs cover different types of exposure: infrequent 1-hour exposures, repeated 8-hour exposures, and continuous long-term exposure. The proposed HDI and toluene RELs were developed using the most recent *Air Toxics “Hot Spots” Program Technical Support Document for the Derivation of Noncancer Reference Exposure Levels*¹⁷, finalized by OEHHA in 2008. The public review and comment period for both proposed REL changes was from December 1, 2017 to February 14, 2018. SCAQMD staff will evaluate the impact of the REL changes once they are finalized and published by OEHHA.

2.10 National Air Toxics Assessment (NATA)

Every three years, beginning in 1996, U.S. EPA prepares a National Air Toxics Assessment (NATA).¹⁸ The purpose of NATA is to provide census-tract modeled ambient and exposure concentrations and risks by: (1) identification and prioritization of toxic air contaminants of greatest concern and, (2) determination of the relative risk contribution from each of the major source categories (i.e., on-road, off-road, point, and area). The results would allow U.S. EPA, state and local agencies to prioritize pollutants, sources and areas of interest for additional studies. As part of this process, SCAQMD staff coordinates with U.S. EPA and CARB staff to ensure that NATA incorporates the best available local emissions data. The current triennial inventory process began in September 2016 for the purpose of reviewing data from the 2014 National Emissions Inventory. In September 2016, U.S. EPA released preliminary point source data for review, which included over 1,300 facilities within SCAQMD’s jurisdiction. In January 2017, U.S. EPA amended the data set to account for updated meteorological data and the unit risk change for ethylene oxide. SCAQMD staff identified approximately 70 facilities as potential sources of elevated risk for further investigation.

Following the investigation, SCAQMD staff made several corrections to emissions, source characteristics, processes, pollutants, and stack parameters for approximately 20 facilities. The corrections were provided to U.S. EPA from April to May, 2017. The second review for data regarding non-point source data began in late June. U.S. EPA’s anticipated schedule for review of this information was through the end of 2017, with final results available in Spring of 2018. The results have not been finalized and preliminary information has not been released to the public yet.

¹⁶ <https://oehha.ca.gov/air/crn/public-comment-period-and-workshops-draft-reference-exposure-levels-hexamethylene>

¹⁷ <https://oehha.ca.gov/air/crn/notice-adoption-air-toxics-hot-spots-program-technical-support-document-derivation>

¹⁸ The U.S. EPA’s web portal to NATA is at:
<https://www.epa.gov/national-air-toxics-assessment>

3. FUTURE ACTIVITIES

3.1 AB 2588 Activities

In 2018, staff will prioritize approximately 260 facilities, and notify those with high priority scores to prepare ATIRs or VRRPs, if eligible, and HRAs and RRP, if necessary. There are a substantial number of ATIRs and VRRPs that are expected to be reviewed in 2018. Public notification will also occur for multiple facilities including GS II (ID 57094), Aerocraft Heat Treating Co. (ID 23752), and Anaplex Corporation (ID 16951).

3.2 Model-Monitor Reconciliation

In response to community concerns regarding fugitive emissions and difficulties quantifying those emissions, the SCAQMD Governing Board, at its June 3, 2016 meeting, approved a contract for Protocol Development for Reconciling Air Quality Monitoring Data with Dispersion Modeling Results to provide support in developing a consistent methodology for facilities to use when preparing AB 2588 HRAs. On June 30, 2017, work on this contract was suspended due to a potential conflict of interest issue which was brought to staff's attention. Staff is currently working to resolve this conflict.

3.3 Rulemaking

3.3.1 – Proposed Amended Rule 1403 – Asbestos Emissions from Demolition/Renovation Activities

Amendments to Rule 1403 will include specific requirements when conducting asbestos-emitting demolition/renovation activities at schools, daycare centers, and other establishments that have sensitive populations. Amendments may include other provisions to improve the implementation of the rule. No specific control strategies have been identified. As of May 2018, one working group meeting has been held.

3.3.2 – Proposed Amended Rule 1407 - Control of Emissions of Arsenic, Cadmium and Nickel from Non-Ferrous Metal Operations

Amendments to Rule 1407 will establish additional requirements to minimize air toxics from metal melting operations. SCAQMD staff is analyzing sources subject to the proposed amendments and may develop a separate proposed Rule 1407.1 for the largest sources subject to the proposed amendments and expand the applicability to address ferrous metal operations and hexavalent chromium emissions. As of May 2018, four working group meetings have been held. Control strategies under discussion include adopting point source controls and parameter monitoring for air pollution control equipment, as well as building enclosures to minimize or eliminate cross-draft and certain housekeeping measures.

3.3.3 – Proposed Rule 1407.1 – Control of Emissions of Arsenic, Cadmium and Nickel from Ferrous Metal Operations

Proposed Rule 1407.1 will address ferrous metal melting, compared to Proposed Amended Rule 1407 which will address non-ferrous melting. During the rulemaking process, some stakeholders requested to maintain the existing applicability of Rule 1407 and address ferrous metal melting in a separate rule. Proposed Rule 1407.1 will primarily be a data gathering rule with requirements for emissions testing, analyses, and recordkeeping. Emissions testing may include testing for arsenic,

cadmium, hexavalent chromium, lead, and nickel. Analyses may include bag house catch, raw materials, final materials, metal-containing waste, and slag. Recordkeeping requirements may include melt logs, weight of metal-containing waste, and schedules of housekeeping and maintenance. SCAQMD staff will evaluate Rule 1407.1 data for emissions data from ferrous metal-melting operations for future rulemaking.

3.3.4 – Proposed Amended Rule 1410 – Hydrogen Fluoride Use at Refineries

The proposed amendments will establish requirements for use of hydrogen fluoride at refineries. Hydrogen fluoride is a chemical compound used in petroleum alkylation processes to make higher octane gasolines. When contacted with moisture, it converts to hydrofluoric acid, which is highly corrosive and toxic. Six working group discussions were held in 2017. The measures under discussion involve identifying alternative alkylation technologies, methods to transition from hydrogen fluoride to other alkylation technologies, and monitoring methodologies, and mitigation of the effects of any releases. There are currently two refineries within SCAQMD's jurisdiction which would be subject to this rule. Previously, Rule 1410 was adopted in 1991 but suspended the following year due to Los Angeles Superior Court action.

3.3.5 – Proposed Rule 1435 - Control of Emissions from Metal Heat Treating Processes

Proposed Rule 1435 will establish requirements to reduce metal particulate emissions from heat treating processes. SCAQMD staff is currently evaluating metal heat treating processes to determine the significance of hexavalent chromium emissions. No specific control strategies have been identified at this time.

3.3.6– Proposed Amended Rule 1469 - Hexavalent Chromium Emissions from Chromium Electroplating and Chromic Acid Anodizing Operations

Proposed Amended Rule 1469 proposes new requirements for hexavalent chromium-containing tanks that are currently not regulated, building enclosures, housekeeping and best management practices, periodic source testing, and parameter monitoring of pollution control equipment. Proposed Amended Rule 1469 includes provisions for a revised chemical fume suppressant certification process that further considers toxicity and exposure, and provisions to encourage the elimination of hexavalent chromium in Rule 1469 processes. Additional proposed amendments are incorporated to align Rule 1469 with U.S. EPA National Emission Standards for Hazardous Air Pollutants for Chromium Electroplating.

3.3.7– Proposed Rule 1480 – Air Toxics Metal Monitoring

Proposed Rule 1480 will establish provisions for when ambient monitoring is required and the toxic air contaminants that will be monitored. Ambient air monitoring measures concentration of specific pollutants in ambient air can identify emission sources that were previously not known and need pollution controls, and can assist in determining effectiveness of existing pollution controls that are currently implemented. The rule is intended to provide a comprehensive approach to all toxic metals monitoring as well as provide current and consistent sampling methodologies across all programs. Threshold levels for the monitored toxic air contaminants and approaches for monitoring will also be addressed. As of May 2018, one working group meeting has been held.

APPENDIX A - HEALTH RISKS FROM FACILITIES WITH AN APPROVED HRA

The tables in Appendix A list the facilities and the health risks identified in their HRAs or RRP as reviewed and approved by SCAQMD staff. Risks presented in this table were calculated based on guidance that was available from OEHHA at the time of HRA approval. For example, the health risks presented in this appendix for facilities with HRA approval date prior to 2015 do not include the health risk calculation methodologies (2015 OEHHA HRA Guidelines) that account for the differences in children's breathing rates and place greater emphasis on their susceptibility to cancer risk in comparison to adults. The health risks in all HRAs finalized by SCAQMD staff in 2015 were recalculated to reflect the 2015 OEHHA HRA Guidelines.

Appendix A-1 lists the facilities in order of their cancer risks and Appendix A-2 lists the facilities ordered by facility ID. The listed health risks are from an approved HRA, unless an approved RRP has been fully implemented. In those instances, the listed health risks reflect the health risks after the implementation of the RRP. Appendix A-3 lists the status of the facility's RRP and is presented by facility ID. Attention should also be given to the other footnotes in the table denoting facilities with updated HRAs pending approval and facilities with health risks including emergency diesel internal combustion engines. It also provides the current status of each facility as follows:

- A – Active (note that facilities with “Active” status within SCAQMD’s database might not be in operation currently)
- I – Inactive
- OB – Out of business

“Inactive” and “out of business” facilities have been retained for historical purposes since staff occasionally receives public inquiries regarding “inactive” or “out of business” facilities. Facilities that have gone through change of ownership could have different name and facility ID numbers. The following health risk levels are identified in SCAQMD Rule 1402 – Control of Toxic Air Contaminants from Existing Sources:

- **Action Risk Level:** Cancer risk ≥ 25 in a million; Acute HI ≥ 3.0 ; Chronic HI ≥ 3.0 , Cancer Burden ≥ 0.5
- **Public Notification Level:** Cancer risk ≥ 10 in a million; Acute HI > 1.0 ; Chronic HI > 1.0
- **Exemption Level:** Cancer risk < 1 in a million; Acute HI < 0.1 ; Chronic HI < 0.1

Table A-1
Health Risks from Facilities with an Approved HRA
 (Listed in descending order by cancer risk)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (per million)	Cancer Burden (f)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (e)
11818	A	HIKSON METAL FINISHING	NEWPORT BEACH	0.8	ND	0.04	0.006	2015
124838	OB	EXIDE TECHNOLOGIES	LOS ANGELES	0	ND	0	0	2013
18989	A	BOWMAN PLATING CO INC	COMPTON	5.01	0.00102	0.0141	0.0115	2015
18931	A	GERDAU	RANCHO CUCAMONGA	8.7	0.25	0.49	0.61	2015
171107	A	PHILLIPS 66 CO/LA REFINERY WILMINGTON PL	WILMINGTON	23.2	0.29	0.1	0.7	2013
122822	I	CONSOLIDATED FILM INDUSTRIES	HOLLYWOOD	21.0	ND	0.1	0.4	2000
176967	A	GAS RECOVERY SYSTEMS, INC	IRVINE	20.1	0.18	0.6	0.3	2009
14495	A	VISTA METALS CORP	FONTANA	19.8	0.06	0.0	0.3	2008
165192	A	TRIUMPH AEROSTRUCTURES, LLC (b)	HAWTHORNE	19.7	ND	0.64	0.24	1999
11142	OB	KEYSOR-CENTURY CORP	SAUGUS	17.0	ND	0.5	0.1	2000
8547	A	QUEMETCO INC (c)	INDUSTRY	7.1	0.45	0.09	0.69	2016
22911	A	CARLTON FORGE WORKS	PARAMOUNT	15.4	ND	1.76	1.04	2016
35302	A	OWENS CORNING (c)	COMPTON	14.0	0.02	0.1	0.1	2000
41229	A	LUBECO INC	LONG BEACH	14.0	ND	0.0	0.1	2002
48323	A	SIGMA PLATING CO INC	LA PUENTE	13.8	0.017	0.01	0.74	2001
23907	A	JOHNS MANVILLE CORP	CORONA	13.0	ND	0.4	2.7	1999
18648	OB	CROWN CITY PLATING CO.	EL MONTE	12.0	ND	0.4	0.1	2000
29110	A	ORANGE, COUNTYOF - SANITATION DISTRICT (d)	HUNTINGTON BEACH	10.7	ND	1.8	0.5	2007
800436	A	TESORO REFINING AND MARKETING CO	WILMINGTON	10.7	0.37	0.3	0.4	2013
155828	A	GARRETT AVIATION SVCS. LLC DBA STANDARD	LOS ANGELES	9.3	ND	0.19	0.25	2002
106797	OB	SAINT-GOBAIN CONTAINERS LLC	LOS ANGELES	9.9	ND	0.0	0.1	2000
101380	OB	GENERAL DYNAMICS OTS (DOWNEY) INC	DOWNEY	9.8	ND	0.0	0.1	2000
148925	A	CHERRY AEROSPACE LLC	SANTA ANA	9.7	ND	0.1	0.2	1999
800373	I	CENCO REFINING COMPANY	SANTA FE SPRINGS	9.7	ND	0.3	0.1	2000
800183	A	PARAMOUNT PETR CORP (EIS USE)	PARAMOUNT	9.6	ND	0.0	0.0	2002
800318	A	GRISWOLD INDUSTRIES	COSTA MESA	9.5	0.01	0.1	0.0	2001
15504	A	SCHLOSSER FORGE CO	RANCHO CUCAMONGA	9.5	0.067	1.59	1.11	2002
800149	A	US BORAX INC	WILMINGTON	9.5	ND	0.0	0.0	2000
10510	A	GREGG INDUSTRIES INC	EL MONTE	9.4	ND	0.6	0.6	2008
62897	OB	NORTHROP GRUMMAN CORP, MASD	PICO RIVERA	9.4	ND	1.0	0.5	2000

Table A-1 (cont'd)
Health Risks from Facilities with an Approved HRA

(Listed in descending order by cancer risk)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (per million)	Cancer Burden (f)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (e)
42922	OB	CMC PRINTED BAG INC	WHITTIER	9.0	ND	0.0	0.0	1995
174710	A	TESORO LOGISTICS OP LLC, VINVALE MARKETI	SOUTH GATE	9.0	ND	0.0	0.0	1994
169990	A	SPS TECHNOLOGIES, LLC	GARDENA	8.9	ND	0.1	0.1	1999
800184	A	GOLDEN WEST REF CO	SANTA FE SPRINGS	8.8	ND	0.2	0.1	1997
1744	A	KIRKHILL RUBBER CO	BREA	8.7	0.001	0.2	0.1	2007
175124	A	AEROJET ROCKETDYNE OF DE, INC.	CANOGA PARK	8.7	ND	0.0	0.0	1995
44454	A	STRUCTURAL COMPOSITES IND	POMONA	8.6	0.001	0.0	0.2	2002
107168	I	ADVANCED SPA DESIGNS	LA HABRA	8.6	ND	0.0	0.0	1995
2680	A	LA CO., SANITATION DISTRICT	WHITTIER	8.6	ND	0.0	0.0	1999
15736	A	HENRY CO	HUNTINGTON PARK	8.5	ND	0.0	0.0	2000
800057	A	KINDER MORGAN LIQUIDS TERMINALS, LLC	CARSON	8.5	ND	0.0	0.1	1999
800079	A	PETRO DIAMOND TERMINAL CO	LONG BEACH	8.3	ND	0.0	0.2	1998
125281	OB	MODERN PLATING, ALCO CAD-NICKEL PLATING	LOS ANGELES	8.2	ND	0.1	0.0	1995
21615	OB	PERKINELMER OPTOELECTRONICS SC, INC	AZUSA	8.1	ND	0.2	0.1	1998
110924	A	WESTWAY TERMINAL COMPANY	SAN PEDRO	8.0	ND	0.3	0.5	1997
3609	I	AL'S PLATING CO INC	LOS ANGELES	7.8	ND	0.3	0.2	1999
37603	A	SGL TECHNIC INC, POLYCARBON DIVISION	VALENCIA	7.8	ND	0.0	0.4	1998
800182	A	RIVERSIDE CEMENT CO (c)	RIVERSIDE	7.8	0.11	0.1	0.1	2001
13920	A	ST. JOSPEH HOSPITAL	ORANGE	7.7	0.004	0.8	0.3	2008
800089	A	EXXONMOBIL OIL CORPORATION	TORRANCE	7.7	0.15	0.2	0.5	2013
18294	A	NORTHROP GRUMMAN CORP, AIRCRAFT DIV	EL SEGUNDO	7.6	ND	0.13	0.05	1999
113170	A	SANTA MONICA - UCLA MEDICAL CENTER (b)	SANTA MONICA	7.6	0.14	0.2	0.0	1997
800214	A	LA CITY, SANITATION BUREAU (c)	PLAYA DEL REY	7.6	ND	0.1	0.0	1999
20197	A	LAC/USC MEDICAL CENTER	LOS ANGELES	7.5	ND	0.7	0.4	2007
800032	A	CHEVRON U.S.A. INC (EIS USE)	MONTEBELLO	7.5	0.14	0.0	0.2	1999
800150	A	US GOVT, AF DEPT, MARCH AFB (NSR USE)	RIVERSIDE	7.4	0.02	0.3	0.0	2008
108701	A	SAINT-GOBAIN CONTAINERS LLC	EL MONTE	7.3	ND	0.1	0.1	2000
117560	A	EQUILON ENTER, LLC-SHELL OIL PROD. US	WILMINGTON	7.3	ND	0.0	0.1	1998
174655	A	TESORO REFINING & MARKETING CO, LLC	CARSON	7.3	ND	0.3	0.1	2000
800026	A	ULTRAMAR INC (NSR USE ONLY)	WILMINGTON	7.2	0.18	0.7	0.2	2012
800113	A	ROHR,INC	RIVERSIDE	7.2	0.01	0.9	0.0	2007
800236	A	LA CO. SANITATION DIST	CARSON	7.2	ND	0.2	0.1	2007

Table A-1 (cont'd)
Health Risks from Facilities with an Approved HRA

(Listed in descending order by cancer risk)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (per million)	Cancer Burden (f)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (e)
49387	A	UNIV CAL, RIVERSIDE	RIVERSIDE	7.1	ND	0.0	0.0	1999
27343	OB	CON AGRA INC, GILROY FOODS DBA	SANTA ANA	7.1	ND	0.2	0.1	1995
57094	A	GS ROOFING PRODUCTS CO, INC/CERTAINTeed (c)	WILMINGTON	7.0	ND	0.0	0.0	2000
140499	A	AMERESCO HUNTINGTON BEACH, L.L.C.	HUNTINGTON BEACH	7.0	ND	0.0	0.0	1995
800209	A	BKK CORPORATION, LANDFILL DIVISION GNRL	WEST COVINA	6.9	ND	0.0	0.1	2000
800372	A	EQUILON ENTER. LLC, SHELL OIL PROD. US	CARSON	6.9	ND	0.4	0.1	2001
20280	A	METAL SURFACES INC	BELL GARDENS	6.8	0	0.9	0.3	2011
5723	A	DUCOMMUN AEROSTRUCTURES INC	ORANGE	6.7	ND	0.0	0.1	1999
173913	A	TRIUMPH PROCESSING, EMBEE DIV, INC.	SANTA ANA	6.6	ND	0.21	0.58	2000
17301	A	ORANGE, COUNTY OF - SANITATION DISTRICT	FOUNTAIN VALLEY	6.6	0.001	0.4	0.3	2007
118998	OB	CYTEC FIBERITE INC	CULVER CITY	6.6	ND	0.0	0.2	1997
171109	A	PHILLIPS 66 COMPANY/LOS ANGELES REFINERY	CARSON	6.6	0.11	0.0	0.3	2011
6643	A	TECHNICOLOR INC	NORTH HOLLYWOOD	6.5	ND	0.0	0.1	2007
34764	A	CADDOCK ELECTRONICS INC	RIVERSIDE	6.5	ND	0.0	0.1	2002
168088	A	PCCR USA	LYNWOOD	6.5	ND	0.1	1.6	1995
11726	A	GE ENGINE SERVICES	ONTARIO	6.5	ND	0.1	0.6	1999
2852	A	THE WALT DISNEY COMPANY	BURBANK	6.4	0.03	0.0	0.0	1997
800066	A	HITCO CARBON COMPOSITES INC	GARDENA	6.4	ND	0.3	0.0	1995
16660	A	THE BOEING COMPANY	HUNTINGTON BEACH	6.4	0.02	0.01	0.08	2015
4477	A	SO CAL EDISON CO	AVALON	6.3	0.02	0.0	0.0	2012
1226	A	HYATT DIE CAST & ENGINEERING CORP	CYPRESS	6.2	ND	0.0	0.1	1996
800067	A	BOEING SATELLITE SYSTEMS INC	EL SEGUNDO	6.2	ND	0.0	0.1	2000
146570	A	ROHM AND HAAS CHEMICALS LLC	LA MIRADA	6.2	ND	0.5	0.8	1999
45262	A	LA CO, SANITATION DISTRICT UNIT NO.02	GLENDALE	6.2	ND	0.0	0.1	1998
140961	A	GKN AEROSPACE TRANSPARENCY SYS INC	GARDEN GROVE	6.0	ND	0.0	0.5	1996
800022	A	CALNEV PIPE LINE CO (NSR USE)	BLOOMINGTON	5.9	ND	0.0	0.1	1999
800047	I	FLETCHER OIL & REF CO	CARSON	5.9	ND	0.0	0.0	1998
800198	A	ULTRAMAR INC (NSR USE ONLY)	WILMINGTON	5.9	ND	0.0	0.1	1999
800279	A	SFPP, L.P.	ORANGE	5.9	ND	0.0	0.2	1999
8578	OB	ASSOCIATED CONCRETE PROD. INC	SANTA ANA	5.8	ND	0.1	0.6	1999
136148	A	E/M COATING SERVICES	NORTH HOLLYWOOD	5.8	ND	0.3	0.6	1998
65382	A	SFPP, L.P.	BLOOMINGTON	5.8	ND	0.0	0.0	1996

Table A-1 (cont'd)
Health Risks from Facilities with an Approved HRA

(Listed in descending order by cancer risk)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (per million)	Cancer Burden (f)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (e)
164864	A	ARROWHEAD BRASS & PLUMBING	LOS ANGELES	5.7	ND	0.3	0.0	1995
800288	A	UNIV CAL IRVINE (NSR USE ONLY)	IRVINE	5.6	ND	0.0	0.1	1996
22410	A	PALACE PLATING	LOS ANGELES	5.6	ND	0.73	0.38	2004
38971	A	RICOH ELECTRONICS INC	IRVINE	5.6	ND	0.0	0.4	1995
14146	A	MAC GREGOR YACHT CORP	COSTA MESA	5.5	ND	0.0	0.1	1998
43201	A	SNOW SUMMIT INC	BIG BEAR LAKE	5.5	ND	0.2	0.0	2007
54424	A	L & L CUSTOM SHUTTERS	PLACENTIA	5.5	ND	0.2	0.2	2001
800409	A	NORTHROP GRUMMAN SPACE & MISSION SYSTEMS	REDONDO BEACH	5.5	ND	0.5	0.2	1998
800196	A	AMERICAN AIRLINES INC (EIS USE)	LOS ANGELES	5.4	0.190	0.86	0.08	2002
800171	A	EXXONMOBIL OIL CORPORATION	VERNON	5.3	ND	0.1	0.0	1997
134018	A	INDUSTRIAL CONTAINER SERVICES-CA LLC	MONTEBELLO	5.2	ND	0.6	0.2	2000
109198	A	TORCH OPERATING COMPANY	BREA	5.0	ND	0.0	0.0	2001
103888	A	SARGENT FLETCHER INC	EL MONTE	4.9	ND	0.2	0.0	1999
800037	A	DEMENNO/KERDOON	COMPTON	4.9	0.01	0.01	0.02	2009
11192	A	HI-SHEAR CORPORATION	TORRANCE	4.8	ND	0.0	0.0	2008
800038	A	THE BOEING COMPANY - C17 PROGRAM	LONG BEACH	4.8	ND	0.2	0.1	1999
800264	A	EDGINGTON OIL COMPANY	LONG BEACH	4.8	0.001	0.0	0.0	2002
101977	A	SIGNAL HILL PETROLEUM INC	LONG BEACH	4.7	ND	0.6	1.0	1998
3950	A	CROWN CORK & SEAL CO INC	LA MIRADA	4.6	ND	0.0	0.1	1997
83102	A	LIGHT METALS INC	INDUSTRY	4.5	0.01	0.0	2.7	2002
157451	A	VERNON MACHINE CORP, BENDER US DBA	VERNON	4.4	0.001	1.0	0.0	2002
800041	A	DOW CHEM U.S.A. (NSR USE)	TORRANCE	4.4	ND	0.1	0.0	2000
93346	A	WAYMIRE DRUM CO,INC.,S EL MONTE FACILITY	SOUTH EL MONTE	4.3	ND	0.1	0.2	1997
174591	A	TESORO REFINING & MARKETING CO LLC, CAL (c)	WILMINGTON	4.3	ND	0.1	0.2	1995
177042	A	SOLVAY USA, INC	LONG BEACH	4.3	ND	0.3	0.0	2001
124506	A	BOEING ELECTRON DYNAMIC DEVICES INC	TORRANCE	4.2	ND	0.5	0.1	1995
6459	OB	HONEYWELL INTERNATIONAL INC	VERNON	4.1	ND	0.0	0.0	1999
7533	A	HUGO NEU-PROLER CO	TERMINAL ISLAND	4.1	ND	1.3	0.1	
18439	OB	ACE PLATING CO INC	LOS ANGELES	4.1	ND	0.6	0.2	1998
45489	A	ABBOTT CARDIOVASCULAR SYSTEMS, INC.	TEMECULA	3.8	0.01	1.3	0.0	2002
126060	A	STERIGENICS US, LLC	ONTARIO	3.8	0	0.0	0.0	2007
8820	A	REULAND ELECTRIC CO, H.BRITTON LEES	INDUSTRY	3.7	ND	0.0	0.0	1996

Table A-1 (cont'd)
Health Risks from Facilities with an Approved HRA

(Listed in descending order by cancer risk)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (per million)	Cancer Burden (f)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (e)
9114	I	SOMITEX PRINTS OF CAL INC	INDUSTRY	3.7	ND	0.1	0.0	1996
17325	A	ACE CLEARWATER ENTER.	PARAMOUNT	3.7	ND	0.0	0.0	2002
106838	A	VALLEY-TODECO, INC	SYLMAR	3.7	ND	0.2	0.2	2000
105598	A	SENIOR FLEXONICS INC/STAINLESS STEEL DVN	BURBANK	3.6	ND	1.0	0.5	2001
7427	A	OWENS-BROCKWAY GLASS CONTAINER INC	VERNON	3.6	ND	0.01	0.06	1999
800007	OB	ALLIED SIGNAL INC (NSR USE ONLY)	EL SEGUNDO	3.6	ND	0.0	0.5	2000
126197	A	STERIGENICS US, INC.	LOS ANGELES	3.6	ND	0.0	0.0	1996
127568	A	ENGINEERED POLYMER SOLUTION, VALSPAR	MONTEBELLO	3.5	ND	0.1	0.5	2000
151899	A	VINTAGE PRODUCTION CALIFORNIA LLC	NEWHALL	3.5	ND	0.0	0.2	2000
140811	A	DUCOMMUN AEROSTRUCTURES INC	MONROVIA	3.5	0.01	0.0	0.0	2002
8015	A	ANADITE INC	SOUTH GATE	3.5	ND	0.63	0.78	1998
9163	A	INLAND EMPIRE UTL AGEN, A MUN WATER DIS	ONTARIO	3.4	ND	0.3	0.0	2007
57329	OB	KWIKSET CORP	ANAHEIM	3.4	ND	0.0	0.1	2000
151415	A	LINN WESTERN OPERATING, INC	BREA	3.4	ND	0.0	0.0	1999
800204	OB	SIMPSON PAPER CO	POMONA	3.4	ND	0.0	0.0	1996
153546	A	HUCK INTL INC. DBA ALCOA FASTENING SYS.	CARSON	3.3	ND	0.0	0.0	1999
126191	A	STERIGENICS US, INC.	LOS ANGELES	3.3	ND	0.0	0.0	1996
800063	A	GROVER PROD. CO (EIS USE)	LOS ANGELES	3.3	0.039	0.88	0.07	2001
800189	A	DISNEYLAND RESORT	ANAHEIM	3.3	0.03	0.1	0.1	2009
18396	A	SPRAYLAT CORP	LOS ANGELES	3.2	0	0.7	0.0	2012
6384	A	LA CO., RANCHO LOS AMIGOS MEDICAL CENTER	DOWNEY	3.1	ND	0.0	0.1	1999
113676	A	VICKERS	LOS ANGELES	3.0	ND	0.0	0.0	1995
11435	A	THE PQ CORP	SOUTH GATE	3.0	ND	0.0	0.0	1998
174703	A	TESORO REFINING & MARKETING CO LLC CARSO	CARSON	3.0	ND	0.0	0.0	1994
10005	A	ELECTRONIC CHROME GRINDING CO INC	SANTA FE SPRINGS	3.0	0.01	0.2	0.1	2001
52517	A	REXAM PLC, REXAM BEVERAGE CAN COMPANY	CHATSWORTH	2.9	0.01	0.7	0.1	2009
18452	A	UCLA (REGENTS OF UC) (c)	LOS ANGELES	2.9	ND	0.0	0.1	1999
2613	A	US GOVT, NAVY DEPT,NAVAL WEAPONS STN	SEAL BEACH	2.9	ND	0.1	0.0	2002
116868	A	EQUILON ENT LLC/RIALTO TERMINAL	BLOOMINGTON	2.9	ND	0.0	0.0	1999
800035	A	CONTINENTAL AIRLINES INC (NSR USE ONLY)	LOS ANGELES	2.8	ND	0.0	0.1	1995
48274	A	FENDER MUSICAL INST	CORONA	2.8	ND	0.0	0.4	1997
151798	A	TESORO REFINING AND MARKETING CO	CARSON	2.8	ND	0.1	0.0	1999

Table A-1 (cont'd)
Health Risks from Facilities with an Approved HRA

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Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (per million)	Cancer Burden (f)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (e)
167981	A	TESORO LOGISTICS OPERATIONS LLC	WILMINGTON	2.8	ND	0.0	0.0	2000
800030	A	CHEVRON PRODUCTS CO.	EL SEGUNDO	2.7	0.28	0.3	0.1	2001
5887	A	NEXGEN PHARMA INC	IRVINE	2.7	ND	0.0	0.0	1997
16642	A	ANHEUSER-BUSCH INC., (LA BREWERY)	VAN NUYS	2.7	ND	0.0	0.1	1999
25440	A	ROBERTSHAW CONTROLS CO, GRAYSON CONTROLS	LONG BEACH	2.7	ND	0.0	1.0	1998
27701	A	CADDOCK ELECTRONIC	RIVERSIDE	2.7	ND	0.0	0.1	2002
46268	A	CALIFORNIA STEEL INDUSTRIES INC	FONTANA	2.7	0.02	0.2	0.0	1995
137517	A	PACIFIC TERMINALS LLC	ETIWANDA	2.7	ND	0.0	0.2	2000
175191	A	FREEMPORT-MCMORAN OIL & GAS	LOS ANGELES	2.7	ND	0.0	0.1	1997
35483	A	WARNER BROTHERS STUDIO FACILITIES	BURBANK	2.6	ND	0.1	0.3	1997
134943	A	ALCOA GLOBAL FASTENERS, INC. SOUTH BAY	TORRANCE	2.6	ND	0.6	0.0	2008
37507	A	TROJAN BATTERY COMPANY	SANTA FE SPRINGS	2.6	0.001	1.1	1.3	2012
7949	A	CUSTOM FIBERGLASS MFG CO/CUSTOM HARDTOP	LONG BEACH	2.5	ND	0.0	0.0	1995
65381	A	SFPP, L.P. (NSR USE)	CARSON	2.4	ND	0.0	0.1	1999
79682	A	RAMCAR BATTERIES INC	COMMERCE	2.4	1	0.0	0.2	1998
18508	A	AIR PROD & CHEM INC	LOS ANGELES	2.4	ND	0.1	0.8	1999
800202	A	UNIVERSAL STUDIOS INC (EIS USE)	UNIVERSAL CITY	2.4	ND	0.0	0.0	1996
800387	A	CAL INST OF TECH	PASADENA	2.4	ND	0.1	0.0	2007
172878	A	TESORO LOGISTICS OPERATIONS LLC LONG BEA	LONG BEACH	2.4	ND	0.0	0.0	1999
133405	A	BODYCOTE INC/BODYCOTE THERMAL PROCESSING	LOS ANGELES	2.4	ND	0.0	0.2	1999
800039	I	DOUGLAS PRODUCTS DIVISION	TORRANCE	2.4	ND	0.0	0.0	1996
1208	OB	MICROSEMI CORP	SANTA ANA	2.3	ND	0.0	0.0	2001
90546	OB	SORIN BIOMEDICAL INC	IRVINE	2.3	ND	0.0	0.0	1996
160437	A	SOUTHERN CALIFORNIA EDISON	SAN BERNARDINO	2.3	<0.01	<0.01	<0.01	2013
800056	A	KINDER MORGAN LIQUIDS TERMINALS, LLC	WILMINGTON	2.3	0.01	0.0	0.0	1997
800111	OB	THE BOEING COMPANY	DOWNEY	2.3	ND	0.0	0.1	1996
103659	OB	4MC-BURBANK, INC.	BURBANK	2.2	ND	0.6	0.0	2004
99773	A	CYTEC FIBERITE INC	ANAHEIM	2.2	0.0004	0.0	0.2	2000
9668	A	DELUXE LABORATORIES INC,DELUXE LABORATOR	HOLLYWOOD	2.1	ND	0.0	0.0	2000
40829	A	HAWKER PACIFIC INC	SUN VALLEY	2.1	0.0003	0.0	0.1	2009
142267	A	FS PRECISION TECH LLC	RANCHO DOMINGUEZ	2.0	ND	0.1	0.2	2001
800181	A	CALIFORNIA PORTLAND CEMENT CO (c)	COLTON	2.0	ND	0.0	0.4	1996

Table A-1 (cont'd)
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2605	A	3M PHARMACEUTICALS	NORTHRIDGE	2.0	ND	0.4	0.4	1996
14502	A	VERNON CITY, LIGHT & POWER DEPT	VERNON	2.0	0.0004	0.0	0.0	2007
54627	A	HICKORY SPRINGS OF CAL INC	COMMERCE	2.0	ND	0.0	0.5	1998
800325	A	TIDELANDS OIL PRODUCTION CO	LONG BEACH	1.9	ND	0.1	0.6	1999
10245	A	LA CITY,SANITATION BUREAU,TERMINAL ISLAN	SAN PEDRO	1.8	ND	0.0	0.0	2000
23559	OB	JOHNSON CONTROLS BATTERY GROUP INC	FULLERTON	1.8	ND	0.0	0.1	2001
800003	A	HONEYWELL INTERNATIONAL INC	TORRANCE	1.8	ND	0.0	0.0	1999
8309	A	CAMBRO MANUFACTURING CO	HUNTINGTON BEACH	1.7	ND	0.0	0.1	2000
22467	A	LEFIELL MFG CO	SANTA FE SPRINGS	1.7	ND	0.7	0.2	2000
82512	A	BREA CANON OIL CO	WILMINGTON	1.7	ND	0.0	0.0	1996
132954	A	ALL AMERICAN ASPHALT	SAN FERNANDO	1.6	<0.02	0.4	0.3	2017
119907	A	BERRY PETROLEUM COMPANY	SANTA CLARITA	1.6	ND	0.2	0.7	1999
119920	A	PECHINEY CAST PLATE INC	VERNON	1.6	ND	0.3	0.3	1996
133660	A	HAYDEN INDUSTRIAL PRODUCTS	CORONA	1.6	ND	0.8	0.4	1998
107350	A	NATIONAL O-RINGS	DOWNEY	1.5	ND	0.0	0.0	2001
2638	A	OCCIDENTAL COLLEGE	LOS ANGELES	1.5	ND	0.1	0.0	2007
126536	A	CONSOLIDATED FOUNDRIES - POMONA	POMONA	1.5	ND	0.0	0.0	1999
25070	A	LA CO., SANITATION DISTRICT (c)	WHITTIER	1.5	0.003	0.3	0.1	2009
82513	A	BREA CANON OIL COMPANY INC	HARBOR CITY	1.4	ND	0.0	0.0	1996
800408	A	NORTHROP GRUMMAN SPACE & MISSION SYSTEMS	MANHATTAN BEACH	1.4	ND	0.9	0.1	1998
3968	A	TABC, INC	LONG BEACH	1.4	ND	0.1	0.2	1999
62679	A	KOP-COAT INC	VERNON	1.3	ND	0.0	0.5	1997
126544	A	PAC FOUNDRIES-INDUSTRY	INDUSTRY	1.3	ND	0.6	0.1	1996
161300	A	SAPA EXTRUDER, INC	INDUSTRY	1.3	ND	0.0	0.0	1999
2526	A	CHEVRON PRODUCTS CO	VAN NUYS	1.3	ND	0.0	0.0	1996
22551	A	THUMS LONG BEACH CO	SAN PEDRO	1.2	ND	0.0	0.0	2000
42633	A	LA CO., SANITATION DIST	POMONA	1.2	ND	0.0	0.0	1996
106009	A	VENOCO INC.	BEVERLY HILLS	1.2	ND	0.0	0.0	2005
152054	A	LINN WESTERN OPERATING INC	BREA	1.1	ND	0.0	0.1	1996
42514	A	LA CO.,SANITATION DIST,CALABASAS LNDFILL	AGOURA	1.1	0	0.1	0.0	2010
124806	OB	EXIDE TECHNOLOGIES	INDUSTRY	1.0	ND	0.0	0.0	1999
800127	A	SO CAL GAS CO (EIS USE)	MONTEBELLO	1.0	0	0.0	0.0	2009

Table A-1 (cont'd)
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7730	A	CARPENTER CO	RIVERSIDE	0.96	ND	0.03	1.34	2003
20375	A	PRUDENTIAL OVERALL SUPPLY	RIVERSIDE	1.0	ND	0.0	0.1	1997
6670	A	TRU CUT INC	LOS ANGELES	< 1	ND	0.0	0.0	2002
22808	I	PRICE PFISTER INC	PACOIMA	0.9	ND	0.2	0.1	1996
47056	OB	MYERS CONTAINER CORP, IMACC CORP DIV	HUNTINGTON PARK	0.9	ND	0.2	2.0	2002
5177	A	ITT GILFILLAN UNIT NO.02	VAN NUYS	0.9	ND	0.1	0.2	1998
3134	A	THUMS LONG BEACH CO, UNIT NO.05	SAN PEDRO	0.8	ND	0.0	0.0	1996
18378	A	GRUBER SYS INC	VALENCIA	0.8	ND	0.1	0.1	2004
22556	A	THUMS LONG BEACH CO, UNIT NO.02	SAN PEDRO	0.8	ND	0.0	0.0	1996
111415	A	VAN CAN COMPANY	FONTANA	0.8	ND	0.0	0.1	1996
14544	OB	SANTA FE ENAMELING & METAL FINISHING CO	SANTA FE SPRINGS	0.8	ND	0.0	0.4	1999
120088	A	BREITBURN ENERGY COMPANY, LLC	SANTA FE SPRINGS	0.8	ND	0.0	0.0	1998
118406	A	CARSON COGENERATION COMPANY	CARSON	0.8	ND	0.2	0.0	2007
126964	A	EDWARDS LIFESCIENCES LLC	IRVINE	0.8	ND	0.0	0.0	1995
22373	A	JEFFERSON SMURFIT CORPORATION (U.S.)	LOS ANGELES	0.7	ND	0.0	0.0	1996
24060	A	TOMKINS INDUSTRIES INC-LASCO PRODS GROUP	ANAHEIM	0.7	ND	0.0	0.0	1996
800091	A	MOBIL OIL CORP (NSR USE ONLY)	ANAHEIM	0.7	ND	0.0	0.0	1999
772	A	DEFT INC	IRVINE	0.7	ND	0.0	0.0	1995
24756	A	CRANE CO, HYDRO-AIRE DIV	BURBANK	0.6	ND	0.0	0.1	1997
115394	A	AES ALAMITOS, LLC	LONG BEACH	0.6	ND	0.0	0.0	1999
134931	A	ALCOA GLOBAL FASTENERS, INC.	FULLERTON	0.6	ND	1.90	0.02	1997
800327	A	GLENDALE CITY, GLENDALE WATER & POWER	GLENDALE	0.6	ND	0.0	0.0	1999
15647	A	CUSTOM ENAMELERS INC	FOUNTAIN VALLEY	0.6	ND	0.1	0.0	2000
3093	A	LA CO., OLIVE VIEW/UCLA MEDICAL CENTER	SYLMAR	0.5	ND	0.0	0.0	1999
21895	A	AC PRODUCTS INC	PLACENTIA	0.5	ND	0.0	0.0	2003
6281	A	US GOVT,MARINE CORPS AIR STATION,EL TORO	SANTA ANA	0.5	ND	0.0	0.0	1996
1634	OB	STEELCASE INC, WESTERN DIV	TUSTIN	0.5	ND	0.0	0.0	1995
39388	A	THUMS LONG BEACH CO, UNIT NO.03	SAN PEDRO	0.5	ND	0.0	0.0	1996
61160	A	GE ENGINE SERVICES	ONTARIO	0.5	ND	0.7	0.01	2003
800267	A	TRIUMPH PROCESSING, INC.	LYNWOOD	0.5	0	0.1	0.4	2012
152501	A	PRECISION SPECIALTY METALS INC	LOS ANGELES	0.5	ND	0.4	0.2	2001
43436	A	TST, INC.	FONTANA	0.4	0.11	0.0	0.4	1997

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18990	A	LIFE PAINT CO	SANTA FE SPRINGS	0.4	ND	0.0	0.0	2001
12660	I	GOLDSHIELD FIBERGLASS, INC, PLANT #58	FONTANA	0.4	ND	0.0	0.0	1994
44577	A	LONG BEACH CITY, SERRF PROJECT	LONG BEACH	0.4	0	0.0	0.1	2011
115536	A	AES REDONDO BEACH, LLC	REDONDO BEACH	0.4	ND	0.0	0.0	1998
122295	A	FALCON FOAM, A DIV OF ATLAS ROOFING CORP	LOS ANGELES	0.4	ND	0.0	0.0	1999
115663	A	EL SEGUNDO POWER, LLC	EL SEGUNDO	0.3	ND	0.0	0.0	2000
25638	A	BURBANK CITY, PUB SERV DEPT	BURBANK	0.3	ND	0.3	0.0	1996
124805	A	EXIDE TECHNOLOGIES	COMMERCE	0.3	ND	0.0	0.0	2000
112192	OB	CONSOLIDATED DRUM RECONDITIONING CO INC	SOUTH GATE	0.3	ND	0.0	0.0	1997
550	A	LA CO., INTERNAL SERVICE DEPT	LOS ANGELES	0.3	ND	0.0	0.0	2008
800343	A	BOEING SATELLITE SYSTEMS, INC	EL SEGUNDO	0.3	ND	0.0	0.2	1996
24520	A	LA CO, SANITATION DISTRICTS	ROLLING HILLS ESTATE	0.3	ND	0.0	0.0	1998
99119	A	INTERPLASTIC CORP	HAWTHORNE	0.3	ND	0.1	0.3	1999
122300	A	BASF CORPORATION	COLTON	0.3	ND	0.6	0.0	2002
19989	OB	PARKER HANNIFIN AEROSPACE CORP	IRVINE	0.3	ND	0.0	0.0	1999
107149	A	MARKLAND MANUFACTURING INC	SANTA ANA	0.3	ND	0.1	0.1	2007
161142	A	FOAMEX INNOVATIONS, INC.	COMPTON	0.3	0	0.0	0.0	2010
16264	A	INTL COATINGS CO INC	CERRITOS	0.2	ND	0.0	0.0	1999
800074	A	LA CITY, DWP HAYNES GENERATING STATION	LONG BEACH	0.2	ND	0.0	0.0	2000
48300	A	PRECISION TUBE BENDING	SANTA FE SPRINGS	0.2	ND	0.0	0.0	2002
800168	A	PASADENA CITY, DWP (EIS USE)	PASADENA	0.2	ND	0.7	0.0	1996
800193	A	LA CITY, DWP VALLEY GENERATING STATION	SUN VALLEY	0.2	ND	0.3	0.0	1999
37336	A	COMMERCE REFUSE TO ENERGY FACILITY	COMMERCE	0.1	0	0.0	0.0	2010
42676	A	AES PLACERITA INC	NEWHALL	0.1	ND	0.1	0.0	2003
114801	A	RHODIA INC.	LONG BEACH	0.1	ND	0.0	0.1	2006
115389	A	AES HUNTINGTON BEACH, LLC	HUNTINGTON BEACH	0.1	ND	0.0	0.0	1999
7416	A	PRAXAIR INC	WILMINGTON	0.1	ND	0.0	0.0	2001
1992	A	PRUDENTIAL OVERALL SUPPLY	VAN NUYS	0.1	ND	0.0	0.0	1997
16044	I	SPECIALTY ORGANICS, INC.	IRWINDALE	0.1	ND	0.0	0.2	1997
24812	A	FARMER BROS CO	TORRANCE	0.1	ND	0.0	0.0	1999
25012	A	AMADA MFG AMERICA, INC	LA MIRADA	0.1	ND	0.0	0.0	2002
94872	A	METAL CONTAINER CORP	MIRA LOMA	0.1	ND	0.4	0.4	2002

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111110	A	BRISTOL FIBERLITE INDUSTRIES, INC	SANTA ANA	0.1	ND	0.0	0.0	1995
24118	A	DEVOE COATINGS CO	RIVERSIDE	0.1	ND	0.3	0.1	1999
156741	A	HARBOR COGENERATION CO	WILMINGTON	0.1	ND	0.0	0.0	2002
20144	OB	CANON BUSINESS MACHINES INC	COSTA MESA	0.0	ND	0.0	0.1	1999
800320	A	AMVAC CHEMICAL CORP	LOS ANGELES	0.0	ND	0.1	0.3	2004
14217	OB	MODERN FAUCET MFG COMPANY	LOS ANGELES	0.0	ND	0.0	0.5	1996
45938	A	E.M.E. INC/ELECTRO MACHINE & ENGINEERING	COMPTON	0.0	ND	0.0	0.0	1999
117785	A	BALL METAL BEVERAGE CONTAINER CORP.	TORRANCE	0.0	ND	0.2	0.9	2001
22229	A	PROCESSES BY MARTIN INC	LYNWOOD	0.0	ND	0.0	0.0	2002
800075	A	LA CITY, DWP SCATTERGOOD GENERATING STA	PLAYA DEL REY	0.0	ND	0.0	0.0	2000
160150	A	ERGON ASPHALT & EMULSIONS, INC.	FONTANA	0.0	ND	0.3	0.0	1999
115586	A	SUNDANCE SPAS, INC	CHINO	0.0	ND	0.0	0.4	1996
51620	A	WHEELABRATOR NORWALK ENERGY CO INC	NORWALK	0.0	ND	0.0	0.0	1996
61743	A	AMERON STEEL FABRICATION DIVISION	FONTANA	0.0	ND	0.2	0.2	2000
55711	A	SUNLAW COGENERATION PARTNERS I	VERNON	0.0	ND	0.0	0.0	1996
124016	A	OAKLITE PRODUCTS (BRENT AMERICA, INC./ LEEDER ARDOX)	LA MIRADA	0.0	ND	0.1	0.1	2000
55714	A	SUNLAW COGENERATION PARTNERS I	VERNON	0.0	ND	0.0	0.0	1996
119127	A	PRC-DE SOTO INTERNATIONAL	GLENDALE	0.0	ND	0.0	0.0	2000
809	A	GARNER GLASS CO	CLAREMONT	0.0	ND	0.0	0.0	1996
1732	OB	INTL ELECTRONIC RESEARCH CORP	BURBANK	0.0	ND	0.0	0.0	1996
1746	A	UNITED ALLOYS INC	LOS ANGELES	0.0	ND	0.0	0.0	1998
3084	A	CARDINAL INDUSTRIAL FINISHES INC	SOUTH EL MONTE	0.0	ND	0.0	0.0	1996
3100	A	BAXTER HEALTHCARE CORP, I V SYSTEMS	IRVINE	0.0	ND	0.0	0.4	1994
3578	A	PRUDENTIAL OVERALL SUPPLY	CARSON	0.0	ND	0.0	0.0	1995
4616	OB	SUPERIOR IND INTL INC	VAN NUYS	0.0	ND	0.0	0.4	1997
5125	OB	UTILITY TRAILER MFG CO	INDUSTRY	0.0	ND	0.0	0.3	1996
5645	OB	STANDARD NICKEL CHROMIUM PLATING CO INC	LOS ANGELES	0.0	ND	0.0	0.0	1999
6163	A	OHLINE	GARDENA	0.0	ND	0.3	0.7	1996
6315	A	FLO-KEM, INC.	RANCHO DOMINGUEZ	0.0	ND	0.0	0.6	1999
6362	OB	JACUZZI WHIRLPOOL BATH INC	SANTA ANA	0.0	ND	0.0	0.0	1995
7010	A	PRUDENTIAL OVERALL SUPPLY	IRVINE	0.0	ND	0.0	0.0	1995
8560	A	PRUDENTIAL OVERALL SUPPLY CO	COMMERCE	0.0	ND	0.2	0.4	1995

Table A-1 (cont'd)
Health Risks from Facilities with an Approved HRA

(Listed in descending order by cancer risk)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (per million)	Cancer Burden (f)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (e)
8935	A	TRAIL RITE INC	SANTA ANA	0.0	ND	0.0	0.3	1996
10656	A	NEWPORT LAMINATES	SANTA ANA	0.0	ND	0.0	0.0	1996
12493	A	REMO INC	NORTH HOLLYWOOD	0.0	ND	0.0	0.0	1997
12879	OB	CYTEC ENGINEERED MATERIALS, INC	SAUGUS	0.0	ND	0.0	0.0	1994
14191	I	NIKOR CHEMICAL COMPANY INC	CARSON	0.0	ND	0.0	0.0	2002
19953	OB	RISTON KELLER INC	IRVINE	0.0	ND	0.0	0.0	1996
21544	A	US GOVT, MARINE CORPS AIR STA @BLD	Tustin	0.0	ND	0.0	0.0	2000
22092	A	WESTERN TUBE & CONDUIT CORP	LONG BEACH	0.0	ND	0.0	0.6	1997
24647	A	J. B. I. INC	COMPTON	0.0	ND	0.0	0.2	1999
40806	A	NEW BASIS	RIVERSIDE	0.0	ND	0.7	0.2	1997
47459	OB	JACUZZI WHIRLPOOL BATH	IRVINE	0.0	ND	0.0	0.0	1995
51849	A	ELIMINATOR CUSTOM BOATS	MIRA LOMA	0.0	ND	0.0	0.0	1995
61209	OB	AKZO NOBEL CHEM INC, FILTROL CORP SUB OF	LOS ANGELES	0.0	ND	0.0	0.0	1996
70021	A	XERXES CORP (A DELAWARE CORP)	ANAHEIM	0.0	ND	0.0	0.0	1996
132343	A	SPECTRUM PAINT & POWDER, INC.	ANAHEIM	0.0	ND	0.2	0.7	1997
144677	A	PRATT & WHITNEY ROCKETDYNE/RUBY ACQ ENT	CANOGA PARK	0.0	ND	0.0	0.0	1996
149241	A	REGAL CULTURED MARBLE	POMONA	0.0	ND	0.0	0.2	1995
160916	A	FOAMEX INNOVATIONS, INC.	ORANGE	0.0	ND	0.4	0.4	1994
800087	A	MENASCO MFG CO (EIS USE)	BURBANK	0.0	ND	0.0	0.0	1997
800273	OB	CHEMOIL REF CORP (NSR USE ONLY)	SIGNAL HILL	0.0	ND	0.0	0.0	2000
800337	OB	CHEVRON U.S.A., INC (NSR USE)	LA HABRA	0.0	ND	0.0	0.0	1996

Notes:

- (a) A = Active (note that facilities with “Active” status within SCAQMD’s database might not be in operation currently); I = Inactive; OB = Out of Business
- (b) The specific risk driver listed in this HRA is no longer in use & the resulting risk has been eliminated or minimized.
- (c) SCAQMD staff has requested these facilities to update their HRAs.
- (d) This includes risk attributable to the emergency DICE. The total facility risks excluding the emergency DICE are less than 10 in a million.
- (e) All HRAs with HRA Approval Year dated 2015 and later have used the 2015 OEHHA HRA Guidelines for preparation of their HRA.
- (f) ND = Not Determined

Table A-2
Health Risks from Facilities with an Approved HRA
(Listed by Facility ID)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (per million)	Cancer Burden (f)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (e)
550	A	LA CO., INTERNAL SERVICE DEPT	LOS ANGELES	0.3	ND	0.0	0.0	2008
772	A	DEFT INC	IRVINE	0.7	ND	0.0	0.0	1995
809	A	GARNER GLASS CO	CLAREMONT	0.0	ND	0.0	0.0	1996
1208	OB	MICROSEMI CORP	SANTA ANA	2.3	ND	0.0	0.0	2001
1226	A	HYATT DIE CAST & ENGINEERING CORP	CYPRESS	6.2	ND	0.0	0.1	1996
1634	OB	STEELCASE INC, WESTERN DIV	TUSTIN	0.5	ND	0.0	0.0	1995
1732	OB	INTL ELECTRONIC RESEARCH CORP	BURBANK	0.0	ND	0.0	0.0	1996
1744	A	KIRKHILL RUBBER CO	BREA	8.7	0.001	0.2	0.1	2007
1746	A	UNITED ALLOYS INC	LOS ANGELES	0.0	ND	0.0	0.0	1998
1992	A	PRUDENTIAL OVERALL SUPPLY	VAN NUYS	0.1	ND	0.0	0.0	1997
2526	A	CHEVRON PRODUCTS CO	VAN NUYS	1.3	ND	0.0	0.0	1996
2605	A	3M PHARMACEUTICALS	NORTHRIDGE	2.0	ND	0.4	0.4	1996
2613	A	US GOVT, NAVY DEPT,NAVAL WEAPONS STN	SEAL BEACH	2.9	ND	0.1	0.0	2002
2638	A	OCCIDENTAL COLLEGE	LOS ANGELES	1.5	ND	0.1	0.0	2007
2680	A	LA CO., SANITATION DISTRICT	WHITTIER	8.6	ND	0.0	0.0	1999
2852	A	THE WALT DISNEY COMPANY	BURBANK	6.4	0.03	0.0	0.0	1997
3084	A	CARDINAL INDUSTRIAL FINISHES INC	SOUTH EL MONTE	0.0	ND	0.0	0.0	1996
3093	A	LA CO., OLIVE VIEW/UCLA MEDICAL CENTER	SYLMAR	0.5	ND	0.0	0.0	1999
3100	A	BAXTER HEALTHCARE CORP, I V SYSTEMS	IRVINE	0.0	ND	0.0	0.4	1994
3134	A	THUMS LONG BEACH CO, UNIT NO.05	SAN PEDRO	0.8	ND	0.0	0.0	1996
3578	A	PRUDENTIAL OVERALL SUPPLY	CARSON	0.0	ND	0.0	0.0	1995
3609	I	AL'S PLATING CO INC	LOS ANGELES	7.8	ND	0.3	0.2	1999
3950	A	CROWN CORK & SEAL CO INC	LA MIRADA	4.6	ND	0.0	0.1	1997
3968	A	TABC, INC	LONG BEACH	1.4	ND	0.1	0.2	1999
4477	A	SO CAL EDISON CO	AVALON	6.3	0.02	0.0	0.0	2012
4616	OB	SUPERIOR IND INTL INC	VAN NUYS	0.0	ND	0.0	0.4	1997
5125	OB	UTILITY TRAILER MFG CO	INDUSTRY	0.0	ND	0.0	0.3	1996
5177	A	ITT GILFILLAN UNIT NO.02	VAN NUYS	0.9	ND	0.1	0.2	1998
5645	OB	STANDARD NICKEL CHROMIUM PLATING CO INC	LOS ANGELES	0.0	ND	0.0	0.0	1999
5723	A	DUCOMMUN AEROSTRUCTURES INC	ORANGE	6.7	ND	0.0	0.1	1999

Table A-2 (cont'd)
Health Risks from Facilities with an Approved HRA
 (Listed by Facility ID)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (per million)	Cancer Burden (f)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (e)
5887	A	NEXGEN PHARMA INC	IRVINE	2.7	ND	0.0	0.0	1997
6163	A	OHLINE	GARDENA	0.0	ND	0.3	0.7	1996
6281	A	US GOVT,MARINE CORPS AIR STATION,EL TORO	SANTA ANA	0.5	ND	0.0	0.0	1996
6315	A	FLO-KEM, INC.	RANCHO DOMINGUEZ	0.0	ND	0.0	0.6	1999
6362	OB	JACUZZI WHIRLPOOL BATH INC	SANTA ANA	0.0	ND	0.0	0.0	1995
6384	A	LA CO., RANCHO LOS AMIGOS MEDICAL CENTER	DOWNEY	3.1	ND	0.0	0.1	1999
6459	OB	HONEYWELL INTERNATIONAL INC	VERNON	4.1	ND	0.0	0.0	1999
6643	A	TECHNICOLOR INC	NORTH HOLLYWOOD	6.5	ND	0.0	0.1	2007
6670	A	TRU CUT INC	LOS ANGELES	< 1	ND	0.0	0.0	2002
7010	A	PRUDENTIAL OVERALL SUPPLY	IRVINE	0.0	ND	0.0	0.0	1995
7416	A	PRAXAIR INC	WILMINGTON	0.1	ND	0.0	0.0	2001
7427	A	OWENS-BROCKWAY GLASS CONTAINER INC	VERNON	3.6	ND	0.0	0.1	1999
7533	A	HUGO NEU-PROLER CO	TERMINAL ISLAND	4.1	ND	1.3	0.1	2003
7730	A	CARPENTER CO	RIVERSIDE	0.96	ND	0.03	1.34	2003
7949	A	CUSTOM FIBERGLASS MFG CO/CUSTOM HARDTOP	LONG BEACH	2.5	ND	0.0	0.0	1995
8015	A	ANADITE INC	SOUTH GATE	3.5	ND	0.63	0.78	1998
8309	A	CAMBRO MANUFACTURING CO	HUNTINGTON BEACH	1.7	ND	0.0	0.1	2000
8547	A	QUEMETCO INC (c)	INDUSTRY	7.1	0.45	0.09	0.69	2016
8560	A	PRUDENTIAL OVERALL SUPPLY CO	COMMERCE	0.0	ND	0.2	0.4	1995
8578	OB	ASSOCIATED CONCRETE PROD. INC	SANTA ANA	5.8	ND	0.1	0.6	1999
8820	A	REULAND ELECTRIC CO, H.BRITTON LEES	INDUSTRY	3.7	ND	0.0	0.0	1996
8935	A	TRAIL RITE INC	SANTA ANA	0.0	ND	0.0	0.3	1996
9114	I	SOMITEX PRINTS OF CAL INC	INDUSTRY	3.7	ND	0.1	0.0	1996
9163	A	INLAND EMPIRE UTL AGEN, A MUN WATER DIS	ONTARIO	3.4	ND	0.3	0.0	2007
9668	A	DELUXE LABORATORIES INC,DELUXE LABORATOR	HOLLYWOOD	2.1	ND	0.0	0.0	2000
10005	A	ELECTRONIC CHROME GRINDING CO INC	SANTA FE SPRINGS	3.0	0.01	0.2	0.1	2001
10245	A	LA CITY,SANITATION BUREAU,TERMINAL ISLAN	SAN PEDRO	1.8	ND	0.0	0.0	2000
10510	A	GREGG INDUSTRIES INC	EL MONTE	9.4	ND	0.6	0.6	2008
10656	A	NEWPORT LAMINATES	SANTA ANA	0.0	ND	0.0	0.0	1996
11142	OB	KEYSOR-CENTURY CORP	SAUGUS	17.0	ND	0.5	0.1	2000
11192	A	HI-SHEAR CORPORATION	TORRANCE	4.8	ND	0.0	0.0	2008

Table A-2 (cont'd)
Health Risks from Facilities with an Approved HRA
 (Listed by Facility ID)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (per million)	Cancer Burden (f)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (e)
11435	A	THE PQ CORP	SOUTH GATE	3.0	ND	0.0	0.0	1998
11726	A	GE ENGINE SERVICES	ONTARIO	6.5	ND	0.1	0.6	1999
11818	A	HIKSON METAL FINISHING	NEWPORT BEACH	0.8	ND	0.04	0.006	2015
12493	A	REMO INC	NORTH HOLLYWOOD	0.0	ND	0.0	0.0	1997
12660	I	GOLDSHIELD FIBERGLASS, INC, PLANT #58	FONTANA	0.4	ND	0.0	0.0	1994
12879	OB	CYTEC ENGINEERED MATERIALS, INC	SAUGUS	0.0	ND	0.0	0.0	1994
13920	A	ST. JOSPEH HOSPITAL	ORANGE	7.7	0.004	0.8	0.3	2008
14146	A	MAC GREGOR YACHT CORP	COSTA MESA	5.5	ND	0.0	0.1	1998
14191	I	NIKOR CHEMICAL COMPANY INC	CARSON	0.0	ND	0.0	0.0	2002
14217	OB	MODERN FAUCET MFG COMPANY	LOS ANGELES	0.0	ND	0.0	0.5	1996
14495	A	VISTA METALS CORP	FONTANA	19.8	0.06	0.0	0.3	2008
14502	A	VERNON CITY, LIGHT & POWER DEPT	VERNON	2.0	0.0004	0.0	0.0	2007
14544	OB	SANTA FE ENAMELING & METAL FINISHING CO	SANTA FE SPRINGS	0.8	ND	0.0	0.4	1999
15504	A	SCHLOSSER FORGE CO	RANCHO CUCAMONGA	9.5	0.067	1.59	1.11	2002
15647	A	CUSTOM ENAMELERS INC	FOUNTAIN VALLEY	0.6	ND	0.1	0.0	2000
15736	A	HENRY CO	HUNTINGTON PARK	8.5	ND	0.0	0.0	2000
16044	I	SPECIALTY ORGANICS, INC.	IRWINDALE	0.1	ND	0.0	0.2	1997
16264	A	INTL COATINGS CO INC	CERRITOS	0.2	ND	0.0	0.0	1999
16642	A	ANHEUSER-BUSCH INC., (LA BREWERY)	VAN NUYS	2.7	ND	0.0	0.1	1999
16660	A	THE BOEING COMPANY	HUNTINGTON BEACH	6.39	0.02	0.01	0.08	2015
17301	A	ORANGE, COUNTY OF - SANITATION DISTRICT	FOUNTAIN VALLEY	6.6	0.001	0.4	0.3	2007
17325	A	ACE CLEARWATER ENTER.	PARAMOUNT	3.7	ND	0.0	0.0	2002
18294	A	NORTHROP GRUMMAN CORP, AIRCRAFT DIV	EL SEGUNDO	7.6	ND	0.13	0.05	1999
18378	A	GRUBER SYS INC	VALENCIA	0.8	ND	0.1	0.1	2004
18396	A	SPRAYLAT CORP	LOS ANGELES	3.2	0	0.7	0.0	2012
18439	OB	ACE PLATING CO INC	LOS ANGELES	4.1	ND	0.6	0.2	1998
18452	A	UCLA (REGENTS OF UC) (c)	LOS ANGELES	2.9	ND	0.0	0.1	1999
18508	A	AIR PROD & CHEM INC	LOS ANGELES	2.4	ND	0.1	0.8	1999
18648	OB	CROWN CITY PLATING CO.	EL MONTE	12.0	ND	0.4	0.1	2000
18931	A	GERDAU	RANCHO CUCAMONGA	8.7	0.25	0.49	0.61	2015
18989	A	BOWMAN PLATING CO INC	COMPTON	5.01	0.00102	0.0141	0.0115	2015

Table A-2 (cont'd)
Health Risks from Facilities with an Approved HRA
 (Listed by Facility ID)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (per million)	Cancer Burden (f)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (e)
18990	A	LIFE PAINT CO	SANTA FE SPRINGS	0.4	ND	0.0	0.0	2001
19953	OB	RISTON KELLER INC	IRVINE	0.0	ND	0.0	0.0	1996
19989	OB	PARKER HANNIFIN AEROSPACE CORP	IRVINE	0.3	ND	0.0	0.0	1999
20144	OB	CANON BUSINESS MACHINES INC	COSTA MESA	0.0	ND	0.0	0.1	1999
20197	A	LAC/USC MEDICAL CENTER	LOS ANGELES	7.5	ND	0.7	0.4	2007
20280	A	METAL SURFACES INC	BELL GARDENS	6.8	0	0.9	0.3	2011
20375	A	PRUDENTIAL OVERALL SUPPLY	RIVERSIDE	1.0	ND	0.0	0.1	1997
21544	A	US GOVT, MARINE CORPS AIR STA @BLD	Tustin	0.0	ND	0.0	0.0	2000
21615	OB	PERKINELMER OPTOELECTRONICS SC, INC	AZUSA	8.1	ND	0.2	0.1	1998
21895	A	AC PRODUCTS INC	PLACENTIA	0.5	ND	0.0	0.0	2003
22092	A	WESTERN TUBE & CONDUIT CORP	LONG BEACH	0.0	ND	0.0	0.6	1997
22229	A	PROCESSES BY MARTIN INC	LYNWOOD	0.0	ND	0.0	0.0	2002
22373	A	JEFFERSON SMURFIT CORPORATION (U.S.)	LOS ANGELES	0.7	ND	0.0	0.0	1996
22410	A	PALACE PLATING	LOS ANGELES	5.6	ND	0.73	0.38	2004
22467	A	LEFIELL MFG CO	SANTA FE SPRINGS	1.7	ND	0.7	0.2	2000
22551	A	THUMS LONG BEACH CO	SAN PEDRO	1.2	ND	0.0	0.0	2000
22556	A	THUMS LONG BEACH CO, UNIT NO.02	SAN PEDRO	0.8	ND	0.0	0.0	1996
22808	I	PRICE PFISTER INC	PACOIMA	0.9	ND	0.2	0.1	1996
22911	A	CARLTON FORGE WORKS	PARAMOUNT	15.4	ND	1.76	1.04	2006
23559	OB	JOHNSON CONTROLS BATTERY GROUP INC	FULLERTON	1.8	ND	0.0	0.1	2001
23907	A	JOHNS MANVILLE CORP	CORONA	13.0	ND	0.4	2.7	1999
24060	A	TOMKINS INDUSTRIES INC-LASCO PRODS GROUP	ANAHEIM	0.7	ND	0.0	0.0	1996
24118	A	DEVOE COATINGS CO	RIVERSIDE	0.1	ND	0.3	0.1	1999
24520	A	LA CO, SANITATION DISTRICTS	ROLLING HILLS ESTATE	0.3	ND	0.0	0.0	1998
24647	A	J. B. I. INC	COMPTON	0.0	ND	0.0	0.2	1999
24756	A	CRANE CO, HYDRO-AIRE DIV	BURBANK	0.6	ND	0.0	0.1	1997
24812	A	FARMER BROS CO	TORRANCE	0.1	ND	0.0	0.0	1999
25012	A	AMADA MFG AMERICA, INC	LA MIRADA	0.1	ND	0.0	0.0	2002
25070	A	LA CO., SANITATION DISTRICT (c)	WHITTIER	1.5	0.003	0.3	0.1	2009
25440	A	ROBERTSHAW CONTROLS CO, GRAYSON CONTROLS	LONG BEACH	2.7	ND	0.0	1.0	1998
25638	A	BURBANK CITY, PUB SERV DEPT	BURBANK	0.3	ND	0.3	0.0	1996
27343	OB	CON AGRA INC, GILROY FOODS DBA	SANTA ANA	7.1	ND	0.2	0.1	1995

Table A-2 (cont'd)
Health Risks from Facilities with an Approved HRA
 (Listed by Facility ID)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (per million)	Cancer Burden (f)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (e)
27701	A	CADDOCK ELECTRONIC	RIVERSIDE	2.7	ND	0.0	0.1	2002
29110	A	ORANGE, COUNTYOF - SANITATION DISTRICT (d)	HUNTINGTON BEACH	10.7	ND	1.8	0.5	2007
34764	A	CADDOCK ELECTRONICS INC	RIVERSIDE	6.5	ND	0.0	0.1	2002
35302	A	OWENS CORNING (e)	COMPTON	14.0	0.02	0.1	0.1	2000
35483	A	WARNER BROTHERS STUDIO FACILITIES	BURBANK	2.6	ND	0.1	0.3	1997
37336	A	COMMERCE REFUSE TO ENERGY FACILITY	COMMERCE	0.1	0	0.0	0.0	2010
37507	A	TROJAN BATTERY COMPANY	SANTA FE SPRINGS	2.6	0.001	1.1	1.3	2012
37603	A	SGL TECHNIC INC, POLYCARBON DIVISION	VALENCIA	7.8	ND	0.0	0.4	1998
38971	A	RICOH ELECTRONICS INC	IRVINE	5.6	ND	0.0	0.4	1995
39388	A	THUMS LONG BEACH CO, UNIT NO.03	SAN PEDRO	0.5	ND	0.0	0.0	1996
40806	A	NEW BASIS	RIVERSIDE	0.0	ND	0.7	0.2	1997
40829	A	HAWKER PACIFIC INC	SUN VALLEY	2.1	0.0003	0.0	0.1	2009
41229	A	LUBECO INC	LONG BEACH	14.0	ND	0.0	0.1	2002
42514	A	LA CO.,SANITATION DIST,CALABASAS LNDFFILL	AGOURA	1.1	0	0.1	0.0	2010
42633	A	LA CO., SANITATION DIST	POMONA	1.2	ND	0.0	0.0	1996
42676	A	AES PLACERITA INC	NEWHALL	0.1	ND	0.1	0.0	2003
42922	OB	CMC PRINTED BAG INC	WHITTIER	9.0	ND	0.0	0.0	1995
43201	A	SNOW SUMMIT INC	BIG BEAR LAKE	5.5	ND	0.2	0.0	2007
43436	A	TST, INC.	FONTANA	0.4	0.11	0.0	0.4	1997
44454	A	STRUCTURAL COMPOSITES IND	POMONA	8.6	0.001	0.0	0.2	2002
44577	A	LONG BEACH CITY, SERRF PROJECT	LONG BEACH	0.4	0	0.0	0.1	2011
45262	A	LA CO, SANITATION DISTRICT UNIT NO.02	GLENDALE	6.2	ND	0.0	0.1	1998
45489	A	ABBOTT CARDIOVASCULAR SYSTEMS, INC.	TEMECULA	3.8	0.01	1.3	0.0	2002
45938	A	E.M.E. INC/ELECTRO MACHINE & ENGINEERING	COMPTON	0.0	ND	0.0	0.0	1999
46268	A	CALIFORNIA STEEL INDUSTRIES INC	FONTANA	2.7	0.02	0.2	0.0	1995
47056	OB	MYERS CONTAINER CORP, IMACC CORP DIV	HUNTINGTON PARK	0.9	ND	0.2	2.0	2002
47459	OB	JACUZZI WHIRLPOOL BATH	IRVINE	0.0	ND	0.0	0.0	1995
48274	A	FENDER MUSICAL INST	CORONA	2.8	ND	0.0	0.4	1997
48300	A	PRECISION TUBE BENDING	SANTA FE SPRINGS	0.2	ND	0.0	0.0	2002
48323	A	SIGMA PLATING CO INC	LA PUENTE	13.8	0.017	0.01	0.74	2001
49387	A	UNIV CAL, RIVERSIDE	RIVERSIDE	7.1	ND	0.0	0.0	1999
51620	A	WHEELABRATOR NORWALK ENERGY CO INC	NORWALK	0.0	ND	0.0	0.0	1996

Table A-2 (cont'd)
Health Risks from Facilities with an Approved HRA
 (Listed by Facility ID)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (per million)	Cancer Burden (f)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (e)
51849	A	ELIMINATOR CUSTOM BOATS	MIRA LOMA	0.0	ND	0.0	0.0	1995
52517	A	REXAM PLC, REXAM BEVERAGE CAN COMPANY	CHATSWORTH	2.9	0.01	0.7	0.1	2009
54424	A	L & L CUSTOM SHUTTERS	PLACENTIA	5.5	ND	0.2	0.2	2001
54627	A	HICKORY SPRINGS OF CAL INC	COMMERCE	2.0	ND	0.0	0.5	1998
55711	A	SUNLAW COGENERATION PARTNERS I	VERNON	0.0	ND	0.0	0.0	1996
55714	A	SUNLAW COGENERATION PARTNERS I	VERNON	0.0	ND	0.0	0.0	1996
57094	A	GS ROOFING PRODUCTS CO, INC/CERTAINTEED (c)	WILMINGTON	7.0	ND	0.0	0.0	2000
57329	OB	KWIKSET CORP	ANAHEIM	3.4	ND	0.0	0.1	2000
61160	A	GE ENGINE SERVICES	ONTARIO	0.5	ND	0.7	0.01	2003
61209	OB	AKZO NOBEL CHEM INC, FILTROL CORP SUB OF	LOS ANGELES	0.0	ND	0.0	0.0	1996
61743	A	AMERON STEEL FABRICATION DIVISION	FONTANA	0.0	ND	0.2	0.2	2000
62679	A	KOP-COAT INC	VERNON	1.3	ND	0.0	0.5	1997
62897	OB	NORTHROP GRUMMAN CORP, MASD	PICO RIVERA	9.4	ND	1.0	0.5	2000
65381	A	SFPP, L.P. (NSR USE)	CARSON	2.4	ND	0.0	0.1	1999
65382	A	SFPP, L.P.	BLOOMINGTON	5.8	ND	0.0	0.0	1996
70021	A	XERXES CORP (A DELAWARE CORP)	ANAHEIM	0.0	ND	0.0	0.0	1996
79682	A	RAMCAR BATTERIES INC	COMMERCE	2.4	1	0.0	0.2	1998
82512	A	BREA CANON OIL CO	WILMINGTON	1.7	ND	0.0	0.0	1996
82513	A	BREA CANON OIL COMPANY INC	HARBOR CITY	1.4	ND	0.0	0.0	1996
83102	A	LIGHT METALS INC	INDUSTRY	4.5	0.01	0.0	2.7	2002
90546	OB	SORIN BIOMEDICAL INC	IRVINE	2.3	ND	0.0	0.0	1996
93346	A	WAYMIRE DRUM CO,INC.,S EL MONTE FACILITY	SOUTH EL MONTE	4.3	ND	0.1	0.2	1997
94872	A	METAL CONTAINER CORP	MIRA LOMA	0.1	ND	0.4	0.4	2002
99119	A	INTERPLASTIC CORP	HAWTHORNE	0.3	ND	0.1	0.3	1999
99773	A	CYTEC FIBERITE INC	ANAHEIM	2.2	0.0004	0.0	0.2	2000
101380	OB	GENERAL DYNAMICS OTS (DOWNEY) INC	DOWNEY	9.8	ND	0.0	0.1	2000
101977	A	SIGNAL HILL PETROLEUM INC	LONG BEACH	4.7	ND	0.6	1.0	1998
103659	OB	4MC-BURBANK, INC.	BURBANK	2.2	ND	0.6	0.0	2004
103888	A	SARGENT FLETCHER INC	EL MONTE	4.9	ND	0.2	0.0	1999
105598	A	SENIOR FLEXONICS INC/STAINLESS STEEL DVN	BURBANK	3.6	ND	1.0	0.5	2001
106009	A	VENOCO INC.	BEVERLY HILLS	1.2	ND	0.0	0.0	2005
106797	OB	SAINT-GOBAIN CONTAINERS LLC	LOS ANGELES	9.9	ND	0.0	0.1	2000

Table A-2 (cont'd)
Health Risks from Facilities with an Approved HRA
(Listed by Facility ID)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (per million)	Cancer Burden (f)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (e)
106838	A	VALLEY-TODECO, INC	SYLMAR	3.7	ND	0.2	0.2	2000
107149	A	MARKLAND MANUFACTURING INC	SANTA ANA	0.3	ND	0.1	0.1	2007
107168	I	ADVANCED SPA DESIGNS	LA HABRA	8.6	ND	0.0	0.0	1995
107350	A	NATIONAL O-RINGS	DOWNEY	1.5	ND	0.0	0.0	2001
108701	A	SAINT-GOBAIN CONTAINERS LLC	EL MONTE	7.3	ND	0.1	0.1	2000
109198	A	TORCH OPERATING COMPANY	BREA	5.0	ND	0.0	0.0	2001
110924	A	WESTWAY TERMINAL COMPANY	SAN PEDRO	8.0	ND	0.3	0.5	1997
111110	A	BRISTOL FIBERLITE INDUSTRIES, INC	SANTA ANA	0.1	ND	0.0	0.0	1995
111415	A	VAN CAN COMPANY	FONTANA	0.8	ND	0.0	0.1	1996
112192	OB	CONSOLIDATED DRUM RECONDITIONING CO INC	SOUTH GATE	0.3	ND	0.0	0.0	1997
113170	A	SANTA MONICA - UCLA MEDICAL CENTER (b)	SANTA MONICA	7.6	0.14	0.2	0.0	1997
113676	A	VICKERS	LOS ANGELES	3.0	ND	0.0	0.0	1995
114801	A	RHODIA INC.	LONG BEACH	0.1	ND	0.0	0.1	2006
115389	A	AES HUNTINGTON BEACH, LLC	HUNTINGTON BEACH	0.1	ND	0.0	0.0	1999
115394	A	AES ALAMITOS, LLC	LONG BEACH	0.6	ND	0.0	0.0	1999
115536	A	AES REDONDO BEACH, LLC	REDONDO BEACH	0.4	ND	0.0	0.0	1998
115586	A	SUNDANCE SPAS, INC	CHINO	0.0	ND	0.0	0.4	1996
115663	A	EL SEGUNDO POWER, LLC	EL SEGUNDO	0.3	ND	0.0	0.0	2000
116868	A	EQUILON ENT LLC/RIALTO TERMINAL	BLOOMINGTON	2.9	ND	0.0	0.0	1999
117560	A	EQUILON ENTER, LLC-SHELL OIL PROD. US	WILMINGTON	7.3	ND	0.0	0.1	1998
117785	A	BALL METAL BEVERAGE CONTAINER CORP.	TORRANCE	0.0	ND	0.2	0.9	2001
118406	A	CARSON COGENERATION COMPANY	CARSON	0.8	ND	0.2	0.0	2007
118998	OB	CYTEC FIBERITE INC	CULVER CITY	6.6	ND	0.0	0.2	1997
119127	A	PRC-DE SOTO INTERNATIONAL	GLENDALE	0.0	ND	0.0	0.0	2000
119907	A	BERRY PETROLEUM COMPANY	SANTA CLARITA	1.6	ND	0.2	0.7	1999
119920	A	PECHINEY CAST PLATE INC	VERNON	1.6	ND	0.3	0.3	1996
120088	A	BREITBURN ENERGY COMPANY, LLC	SANTA FE SPRINGS	0.8	ND	0.0	0.0	1998
122295	A	FALCON FOAM, A DIV OF ATLAS ROOFING CORP	LOS ANGELES	0.4	ND	0.0	0.0	1999
122300	A	BASF CORPORATION	COLTON	0.3	ND	0.6	0.0	2002
122822	I	CONSOLIDATED FILM INDUSTRIES	HOLLYWOOD	21.0	ND	0.1	0.4	2000
124016	A	OAKLITE PRODUCTS (BRENT AMERICA, INC./ LEEDER ARDOX)	LA MIRADA	0.0	ND	0.1	0.1	2000
124506	A	BOEING ELECTRON DYNAMIC DEVICES INC	TORRANCE	4.2	ND	0.5	0.1	1995

Table A-2 (cont'd)
Health Risks from Facilities with an Approved HRA
 (Listed by Facility ID)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (per million)	Cancer Burden (f)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (e)
124805	A	EXIDE TECHNOLOGIES	COMMERCE	0.3	ND	0.0	0.0	2000
124806	OB	EXIDE TECHNOLOGIES	INDUSTRY	1.0	ND	0.0	0.0	1999
124838	OB	EXIDE TECHNOLOGIES	LOS ANGELES	0	ND	0	0	2013
125281	OB	MODERN PLATING, ALCO CAD-NICKEL PLATING	LOS ANGELES	8.2	ND	0.1	0.0	1995
126060	A	STERIGENICS US, LLC	ONTARIO	3.8	0	0.0	0.0	2007
126191	A	STERIGENICS US, INC.	LOS ANGELES	3.3	ND	0.0	0.0	1996
126197	A	STERIGENICS US, INC.	LOS ANGELES	3.6	ND	0.0	0.0	1996
126536	A	CONSOLIDATED FOUNDRIES - POMONA	POMONA	1.5	ND	0.0	0.0	1999
126544	A	PAC FOUNDRIES-INDUSTRY	INDUSTRY	1.3	ND	0.6	0.1	1996
126964	A	EDWARDS LIFESCIENCES LLC	IRVINE	0.8	ND	0.0	0.0	1995
127568	A	ENGINEERED POLYMER SOLUTION, VALSPAR	MONTEBELLO	3.5	ND	0.1	0.5	2000
132343	A	SPECTRUM PAINT & POWDER, INC.	ANAHEIM	0.0	ND	0.2	0.7	1997
132954	A	ALL AMERICAN ASPHALT	SAN FERNANDO	1.6	<0.02	0.4	0.3	2017
133405	A	BODYCOTE INC/BODYCOTE THERMAL PROCESSING	LOS ANGELES	2.4	ND	0.0	0.2	1999
133660	A	HAYDEN INDUSTRIAL PRODUCTS	CORONA	1.6	ND	0.8	0.4	1998
134018	A	INDUSTRIAL CONTAINER SERVICES-CA LLC	MONTEBELLO	5.2	ND	0.6	0.2	2000
134931	A	ALCOA GLOBAL FASTENERS, INC.	FULLERTON	0.6	ND	1.90	0.02	1997
134943	A	ALCOA GLOBAL FASTENERS, INC. SOUTH BAY	TORRANCE	2.6	ND	0.6	0.0	2008
136148	A	E/M COATING SERVICES	NORTH HOLLYWOOD	5.8	ND	0.3	0.6	1998
137517	A	PACIFIC TERMINALS LLC	ETIWANDA	2.7	ND	0.0	0.2	2000
140499	A	AMERESCO HUNTINGTON BEACH, L.L.C.	HUNTINGTON BEACH	7.0	ND	0.0	0.0	1995
140811	A	DUCOMMUN AEROSTRUCTURES INC	MONROVIA	3.5	0.01	0.0	0.0	2002
140961	A	GKN AEROSPACE TRANSPARENCY SYS INC	GARDEN GROVE	6.0	ND	0.0	0.5	1996
142267	A	FS PRECISION TECH LLC	RANCHO DOMINGUEZ	2.0	ND	0.1	0.2	2001
144677	A	PRATT & WHITNEY ROCKETDYNE/RUBY ACQ ENT	CANOGA PARK	0.0	ND	0.0	0.0	1996
146570	A	ROHM AND HAAS CHEMICALS LLC	LA MIRADA	6.2	ND	0.5	0.8	1999
148925	A	CHERRY AEROSPACE LLC	SANTA ANA	9.7	ND	0.1	0.2	1999
149241	A	REGAL CULTURED MARBLE	POMONA	0.0	ND	0.0	0.2	1995
151415	A	LINN WESTERN OPERATING, INC	BREA	3.4	ND	0.0	0.0	1999
151798	A	TESORO REFINING AND MARKETING CO	CARSON	2.8	ND	0.1	0.0	1999
151899	A	VINTAGE PRODUCTION CALIFORNIA LLC	NEWHALL	3.5	ND	0.0	0.2	2000

Table A-2 (cont'd)
Health Risks from Facilities with an Approved HRA
 (Listed by Facility ID)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (per million)	Cancer Burden (f)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (e)
152054	A	LINN WESTERN OPERATING INC	BREA	1.1	ND	0.0	0.1	1996
152501	A	PRECISION SPECIALTY METALS INC	LOS ANGELES	0.5	ND	0.4	0.2	2001
153546	A	HUCK INTL INC. DBA ALCOA FASTENING SYS.	CARSON	3.3	ND	0.0	0.0	1999
155828	A	GARRETT AVIATION SVCS. LLC DBA STANDARD	LOS ANGELES	9.3	ND	0.19	0.25	2002
156741	A	HARBOR COGENERATION CO	WILMINGTON	0.1	ND	0.0	0.0	2002
157451	A	VERNON MACHINE CORP, BENDER US DBA	VERNON	4.4	0.001	1.0	0.0	2002
160150	A	ERGON ASPHALT & EMULSIONS, INC.	FONTANA	0.0	ND	0.3	0.0	1999
160437	A	SOUTHERN CALIFORNIA EDISON	SAN BERNARDINO	2.3	<0.01	<0.01	<0.01	2013
160916	A	FOAMEX INNOVATIONS, INC.	ORANGE	0.0	ND	0.4	0.4	1994
161142	A	FOAMEX INNOVATIONS, INC.	COMPTON	0.3	0	0.0	0.0	2010
161300	A	SAPA EXTRUDER, INC	INDUSTRY	1.3	ND	0.0	0.0	1999
164864	A	ARROWHEAD BRASS & PLUMBING	LOS ANGELES	5.7	ND	0.3	0.0	1995
165192	A	TRIUMPH AEROSTRUCTURES, LLC (b)	HAWTHORNE	19.7	ND	0.64	0.24	1999
167981	A	TESORO LOGISTICS OPERATIONS LLC	WILMINGTON	2.8	ND	0.0	0.0	2000
168088	A	PCCR USA	LYNWOOD	6.5	ND	0.1	1.6	1995
169990	A	SPS TECHNOLOGIES, LLC	GARDENA	8.9	ND	0.1	0.1	1999
171107	A	PHILLIPS 66 CO/LA REFINERY WILMINGTON PL	WILMINGTON	23.2	0.29	0.1	0.7	2013
171109	A	PHILLIPS 66 COMPANY/LOS ANGELES REFINERY	CARSON	6.6	0.11	0.0	0.3	2011
172878	A	TESORO LOGISTICS OPERATIONS LLC LONG BEA	LONG BEACH	2.4	ND	0.0	0.0	1999
173913	A	TRIUMPH PROCESSING, EMBEE DIV, INC.	SANTA ANA	6.6	ND	0.21	0.58	2000
174591	A	TESORO REFINING & MARKETING CO LLC, CAL (c)	WILMINGTON	4.3	ND	0.1	0.2	1995
174655	A	TESORO REFINING & MARKETING CO, LLC	CARSON	7.3	ND	0.3	0.1	2000
174703	A	TESORO REFINING & MARKETING CO LLC CARSO	CARSON	3.0	ND	0.0	0.0	1994
174710	A	TESORO LOGISTICS OP LLC, VINVALE MARKETI	SOUTH GATE	9.0	ND	0.0	0.0	1994
175124	A	AEROJET ROCKETDYNE OF DE, INC.	CANOGA PARK	8.7	ND	0.0	0.0	1995
175191	A	FREEPORT-MCMORAN OIL & GAS	LOS ANGELES	2.7	ND	0.0	0.1	1997
176967	A	GAS RECOVERY SYSTEMS, INC	IRVINE	20.1	0.18	0.6	0.3	2009
177042	A	SOLVAY USA, INC	LONG BEACH	4.3	ND	0.3	0.0	2001
800003	A	HONEYWELL INTERNATIONAL INC	TORRANCE	1.8	ND	0.0	0.0	1999
800007	OB	ALLIED SIGNAL INC (NSR USE ONLY)	EL SEGUNDO	3.6	ND	0.0	0.5	2000
800022	A	CALNEV PIPE LINE CO (NSR USE)	BLOOMINGTON	5.9	ND	0.0	0.1	1999
800026	A	ULTRAMAR INC (NSR USE ONLY)	WILMINGTON	7.2	0.18	0.7	0.2	2012

Table A-2 (cont'd)
Health Risks from Facilities with an Approved HRA
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Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (per million)	Cancer Burden (f)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (e)
800030	A	CHEVRON PRODUCTS CO.	EL SEGUNDO	2.7	0.28	0.3	0.1	2001
800032	A	CHEVRON U.S.A. INC (EIS USE)	MONTEBELLO	7.5	0.14	0.0	0.2	1999
800035	A	CONTINENTAL AIRLINES INC (NSR USE ONLY)	LOS ANGELES	2.8	ND	0.0	0.1	1995
800037	A	DEMENNO/KERDOON	COMPTON	4.9	0.01	0.01	0.02	2009
800038	A	THE BOEING COMPANY - C17 PROGRAM	LONG BEACH	4.8	ND	0.2	0.1	1999
800039	I	DOUGLAS PRODUCTS DIVISION	TORRANCE	2.4	ND	0.0	0.0	1996
800041	A	DOW CHEM U.S.A. (NSR USE)	TORRANCE	4.4	ND	0.1	0.0	2000
800047	I	FLETCHER OIL & REF CO	CARSON	5.9	ND	0.0	0.0	1998
800056	A	KINDER MORGAN LIQUIDS TERMINALS, LLC	WILMINGTON	2.3	0.01	0.0	0.0	1997
800057	A	KINDER MORGAN LIQUIDS TERMINALS, LLC	CARSON	8.5	ND	0.0	0.1	1999
800063	A	GROVER PROD. CO (EIS USE)	LOS ANGELES	3.3	0.039	0.88	0.07	2001
800066	A	HITCO CARBON COMPOSITES INC	GARDENA	6.4	ND	0.3	0.0	1995
800067	A	BOEING SATELLITE SYSTEMS INC	EL SEGUNDO	6.2	ND	0.0	0.1	2000
800074	A	LA CITY, DWP HAYNES GENERATING STATION	LONG BEACH	0.2	ND	0.0	0.0	2000
800075	A	LA CITY, DWP SCATTERGOOD GENERATING STA	PLAYA DEL REY	0.0	ND	0.0	0.0	2000
800079	A	PETRO DIAMOND TERMINAL CO	LONG BEACH	8.3	ND	0.0	0.2	1998
800087	A	MENASCO MFG CO (EIS USE)	BURBANK	0.0	ND	0.0	0.0	1997
800089	A	EXXONMOBIL OIL CORPORATION	TORRANCE	7.7	0.15	0.2	0.5	2013
800091	A	MOBIL OIL CORP (NSR USE ONLY)	ANAHEIM	0.7	ND	0.0	0.0	1999
800111	OB	THE BOEING COMPANY	DOWNEY	2.3	ND	0.0	0.1	1996
800113	A	ROHR,INC	RIVERSIDE	7.2	0.01	0.9	0.0	2007
800127	A	SO CAL GAS CO (EIS USE)	MONTEBELLO	1.0	0	0.0	0.0	2009
800149	A	US BORAX INC	WILMINGTON	9.5	ND	0.0	0.0	2000
800150	A	US GOVT, AF DEPT, MARCH AFB (NSR USE)	RIVERSIDE	7.4	0.02	0.3	0.0	2008
800168	A	PASADENA CITY, DWP (EIS USE)	PASADENA	0.2	ND	0.7	0.0	1996
800171	A	EXXONMOBIL OIL CORPORATION	VERNON	5.3	ND	0.1	0.0	1997
800181	A	CALIFORNIA PORTLAND CEMENT CO (c)	COLTON	2.0	ND	0.0	0.4	1996
800182	A	RIVERSIDE CEMENT CO (c)	RIVERSIDE	7.8	0.11	0.1	0.1	2001
800183	A	PARAMOUNT PETR CORP (EIS USE)	PARAMOUNT	9.6	ND	0.0	0.0	2002
800184	A	GOLDEN WEST REF CO	SANTA FE SPRINGS	8.8	ND	0.2	0.1	1997
800189	A	DISNEYLAND RESORT	ANAHEIM	3.3	0.03	0.1	0.1	2009
800193	A	LA CITY, DWP VALLEY GENERATING STATION	SUN VALLEY	0.2	ND	0.3	0.0	1999

Table A-2 (cont'd)
Health Risks from Facilities with an Approved HRA
(Listed by Facility ID)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (per million)	Cancer Burden (f)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (e)
800196	A	AMERICAN AIRLINES INC (EIS USE)	LOS ANGELES	5.4	0.190	0.86	0.08	2002
800198	A	ULTRAMAR INC (NSR USE ONLY)	WILMINGTON	5.9	ND	0.0	0.1	1999
800202	A	UNIVERSAL STUDIOS INC (EIS USE)	UNIVERSAL CITY	2.4	ND	0.0	0.0	1996
800204	OB	SIMPSON PAPER CO	POMONA	3.4	ND	0.0	0.0	1996
800209	A	BKK CORPORATION, LANDFILL DIVISION GNRL	WEST COVINA	6.9	ND	0.0	0.1	2000
800214	A	LA CITY, SANITATION BUREAU (c)	PLAYA DEL REY	7.6	ND	0.1	0.0	1999
800236	A	LA CO. SANITATION DIST	CARSON	7.2	ND	0.2	0.1	2007
800264	A	EDGINGTON OIL COMPANY	LONG BEACH	4.8	0.001	0.0	0.0	2002
800267	A	TRIUMPH PROCESSING, INC.	LYNWOOD	0.5	0	0.1	0.4	2012
800273	OB	CHEMOIL REF CORP (NSR USE ONLY)	SIGNAL HILL	0.0	ND	0.0	0.0	2000
800279	A	SFPP, L.P.	ORANGE	5.9	ND	0.0	0.2	1999
800288	A	UNIV CAL IRVINE (NSR USE ONLY)	IRVINE	5.6	ND	0.0	0.1	1996
800318	A	GRISWOLD INDUSTRIES	COSTA MESA	9.5	0.01	0.1	0.0	2001
800320	A	AMVAC CHEMICAL CORP	LOS ANGELES	0.0	ND	0.1	0.3	2004
800325	A	TIDELANDS OIL PRODUCTION CO	LONG BEACH	1.9	ND	0.1	0.6	1999
800327	A	GLENDALE CITY, GLENDALE WATER & POWER	GLENDALE	0.6	ND	0.0	0.0	1999
800337	OB	CHEVRON U.S.A., INC (NSR USE)	LA HABRA	0.0	ND	0.0	0.0	1996
800343	A	BOEING SATELLITE SYSTEMS, INC	EL SEGUNDO	0.3	ND	0.0	0.2	1996
800372	A	EQUILON ENTER. LLC, SHELL OIL PROD. US	CARSON	6.9	ND	0.4	0.1	2001
800373	I	CENCO REFINING COMPANY	SANTA FE SPRINGS	9.7	ND	0.3	0.1	2000
800387	A	CAL INST OF TECH	PASADENA	2.4	ND	0.1	0.0	2007
800408	A	NORTHROP GRUMMAN SPACE & MISSION SYSTEMS	MANHATTAN BEACH	1.4	ND	0.9	0.1	1998
800409	A	NORTHROP GRUMMAN SPACE & MISSION SYSTEMS	REDONDO BEACH	5.5	ND	0.5	0.2	1998
800436	A	TESORO REFINING AND MARKETING CO	WILMINGTON	10.7	0.37	0.3	0.4	2013

Notes:

- a) A = Active (note that facilities with “Active” status within SCAQMD’s database might not be in operation currently); I = Inactive; OB = Out of Business
- b) The specific risk driver listed in this HRA is no longer in use & the resulting risk has been eliminated or minimized.
- c) SCAQMD staff has requested these facilities to update their HRAs.
- d) This includes risk attributable to the emergency DICE. The total facility risks excluding the emergency DICE are less than 10 in a million.
- e) All HRAs with HRA Approval Year dated 2015 and later have used the 2015 OEHHHA HRA Guidelines for preparation of their HRA.
- f) ND = Not Determined

Table A-3 – Status of Risk Reduction Plans

Facility ID	Facility Name	Submitted	Approved	Implemented	Residual Risk			
					Cancer Risk	Chronic HI	Acute HI	Cancer Burden
7427	Owens-Brockway Glass	Yes	Yes	Yes	3.60	0.01	0.06	0.000
7730	E.R. Carpenter	Yes	Yes	Yes	0.96	0.03	1.34	0.000
8015	Anadite Inc.	Yes	Yes	Yes	3.5	0.63	0.78	N/A
8547	Quemetco	Yes	Yes	Yes	7.1	0.09	0.69	0.45
11818	Hixson Metal Finishing	Yes	Yes	No	0.8	0.04	0.006	N/A
14191	Nicklor Chemical Co. (a)	Yes	Yes	Yes	N/A	N/A	N/A	N/A
15504	Schlosser Forge Co.	Yes	Yes	Yes	9.5	1.59	1.11	0.067
16951	Anaplex Corp	Yes	In Progress	In Progress	TBD	TBD	TBD	TBD
18294	Northrop-Grumman	Yes	Yes	Yes	7.6	0.13	0.05	N/A
18931	Gerdau	Yes	Yes	In Progress	8.7	0.49	0.61	0.25
18989	Bowman Plating Co. Inc.	Yes	Yes	In Progress	5.01	0.0141	0.0115	0.00102
22410	Palace Plating (b)	Yes	Yes	Yes	5.6	0.73	0.38	N/A
23752	Aerocraft Heat Treating Co Inc	Yes	In Progress	In Progress	TBD	TBD	TBD	TBD
25012	Amanda Manufacturing America, Inc.	Yes	Yes	Yes	<0.1	0.00	0.00	0.000
41229	Lubeco, Inc. (e)	Yes	In Progress	In Progress	TBD	TBD	TBD	TBD
45938	E.M.E. Inc.	Yes	Yes	Yes	<0.1	0.00	<0.01	0.000
48323	Sigma Plating Co.	Yes	Yes	Yes	13.8	0.01	0.74	0.017
61160	GE Engine Services	Yes	Yes	Yes	0.50	0.7	0.01	0.000
119127	PRC DeSoto International (a)	Yes	Yes	Yes	N/A	N/A	N/A	N/A
124838	Exide Technologies (d)	Yes	Yes	(See Note)	N/A	N/A	N/A	N/A
134931	Alcoa Global Fasteners, Inc.	Yes	Yes	Yes	0.6	1.90	0.02	0.000
155828	Garrett Aviation Services, LLC	Yes	Yes	Yes	9.3	0.19	0.25	N/A
165192	Triumph Aerostructures, LLC. (c)	Yes	Yes	Yes	19.7	0.64	0.24	N/A
173913	Triumph Processing, Embee Div, Inc.	Yes	Yes	Yes	6.6	0.21	0.58	N/A
800037	DeMenno/Kerdoon	Yes	Yes	Yes	4.9	<0.01	0.02	0.01
800063	Grover Products Co.	Yes	Yes	Yes	3.3	0.88	0.07	0.039
800196	American Airlines, Inc.	Yes	Yes	Yes	5.4	0.86	0.08	0.190

Notes:

- (a) Facility has left the Basin, resulting risks are zero.
 (b) Facility has shut down, resulting risks are zero.
 (c) The specific risk driver listed in this HRA is no longer in use & the resulting risk has been eliminated.
 (d) Facility undergoing closure and is no longer operating.
 (e) Represents previously approved HRA and RRP values. New HRA and RRP review is in progress.

APPENDIX B - TRENDS IN AMBIENT AIR TOXICS IN THE SOUTH COAST AIR BASIN

In addition to SCAQMD's periodic Multiple Air Toxics Exposure Studies (MATES), CARB has maintained a long-term continuous toxics monitoring network since the late 1980's.¹⁹ In this appendix, trends in cancer risks are illustrated for sites in the Basin. Health risk levels for the most recent three-year period (i.e., 2014 to 2016) are also shown for the air toxics which are monitored. CARB's monitoring network does not include DPM, which contributes significantly to cancer risks in the Basin. Since this is ambient air quality data, both mobile and stationary emission sources are captured in the health risk levels provided here. Looking at this historical data set illustrates the benefits of past regulatory control efforts.

Four of the approximately 16 current active sites in CARB's statewide toxics monitoring network are in or near the Basin as shown in Figure B-1. CARB's long-term sites are located in Azusa, Los Angeles, and Riverside-Rubidoux. Simi Valley is included in this analysis since it is just outside the western edge of the Basin and represents conditions at the western end of San Fernando Valley. The measurements consist of 24-hour integrated samples collected once every 12 days. Table B-1 lists the toxic air contaminants that are monitored and the carcinogenic compounds in the table are identified with an asterisk.

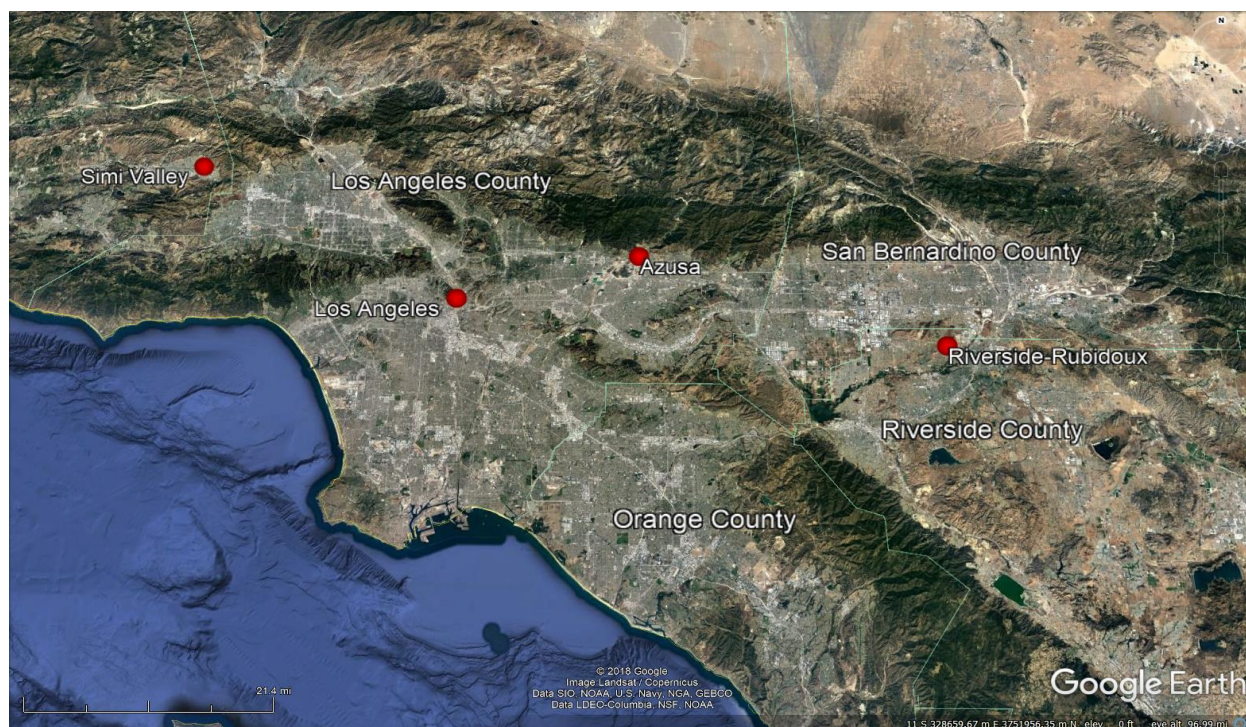


Figure B-1 – CARB toxic monitoring sites in the South Coast Air Basin

¹⁹ Information about and data from CARB's toxic monitoring data are available at:
<http://www.arb.ca.gov/adam/toxics/toxics.html>

Table B-1 – Toxic Air Contaminants Monitored

Toxic VOC		Toxic PM
Acetaldehyde*	Methyl Bromide	Hexavalent Chromium*
Acrolein	Methyl Chloroform	Lead*
Benzene*	Methyl Ethyl Ketone	Manganese
1,3-Butadiene*	Methylene Chloride*	Nickel*
Carbon Tetrachloride*	Perchloroethylene*	Selenium
Chloroform*	Styrene	
Ethyl Benzene*	Toluene	
Formaldehyde*	Trichloroethylene*	

* carcinogen

The 2015 OEHHA HRA Guidelines²⁰ incorporates age sensitivity and exposure factors which increase cancer health risk estimates to residential and sensitive receptors by approximately three times, and more than three times in some cases depending on whether the toxic air contaminant has multiple pathways of exposure in addition to the inhalation pathway. Under the 2015 OEHHA HRA Guidelines, even though the toxic pollutant concentrations may not have increased, the estimated cancer risk to a residential receptor will increase.

Figure B-2a presents health risk trends using the 2015 OEHHA HRA Guidelines. Inhalation cancer health risks have decreased significantly at all stations since 1990. Cancer risks have decreased by 44, 81, and 76 percent at Riverside, Los Angeles, and Simi Valley, respectively²¹. Azusa station shows a decrease in cancer risk by 35 percent since 2000.

Note that the Riverside station shows an increase in cancer risk for 2016. This is solely due to higher measured concentrations of methylene chloride for 2016, which were more than 30 times higher than the previous year. The current available readings for 2017 have dropped to a level that is consistent with 2015 and earlier data. Figure B-2c shows the monitored methylene chloride concentrations at the Riverside station from 2000 to 2017, averaged by quarter.

Nevertheless, the 2016 concentrations have not been invalidated and are therefore included in the estimation of inhalation cancer risk in Figure B-2a. The inhalation cancer risk shown is estimated based on a 30-year exposure. Given that 2017 concentrations of methylene chloride have returned to the levels consistent with earlier years, Figure B-2b shows the trends in cancer risk excluding those measured in 2016. Figures B-2a and B-2b are provided below to show the effect of the 2016 Riverside methylene chloride measurements on the inhalation cancer risk.

²⁰ OEHHA, Air Toxics “Hot Spots” Program Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments, February 2015, adopted March 2015, <https://oehha.ca.gov/air/crn/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0>

²¹ Some concentrations were not available for certain years. In order to avoid under-representing the total cancer risk from all toxic compounds, values are interpolated between years where possible. If data for a certain toxic compound is unavailable for the latest year, the available data point from the most recent prior year is used in its place.

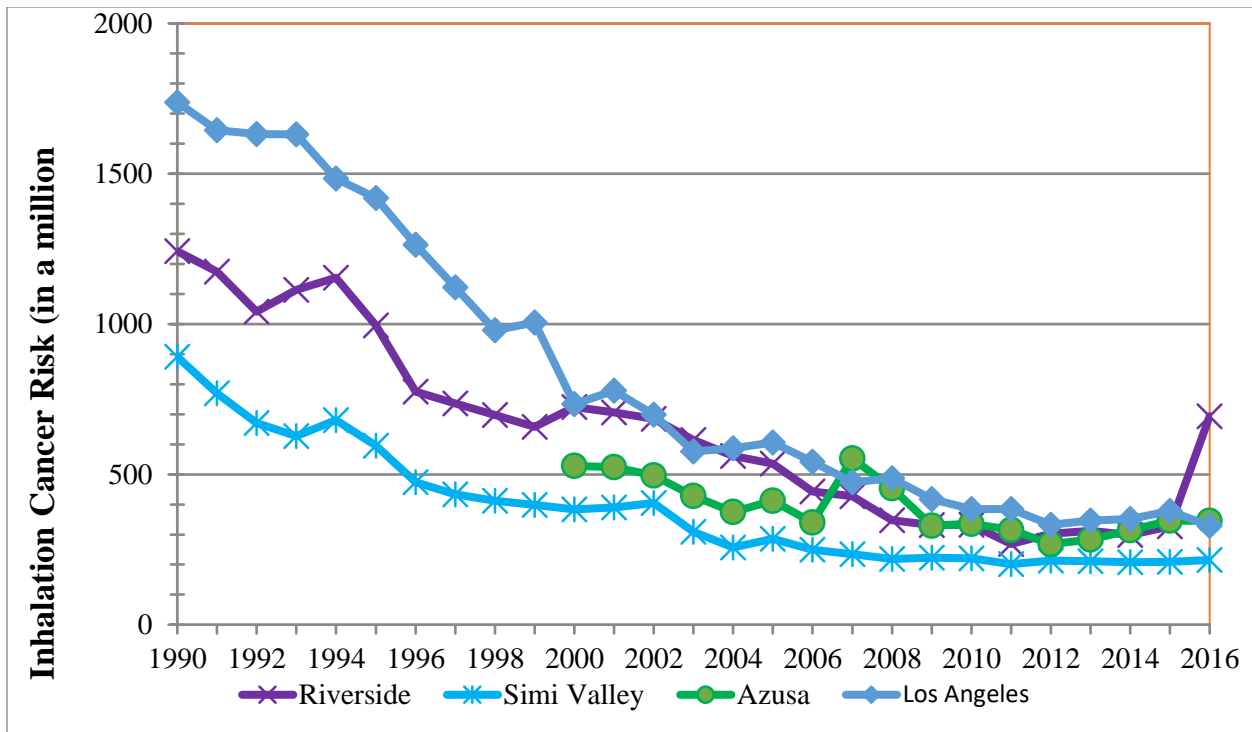


Figure B-2a - Trends in Inhalation Cancer Risks²² in the Basin (1990-2016)

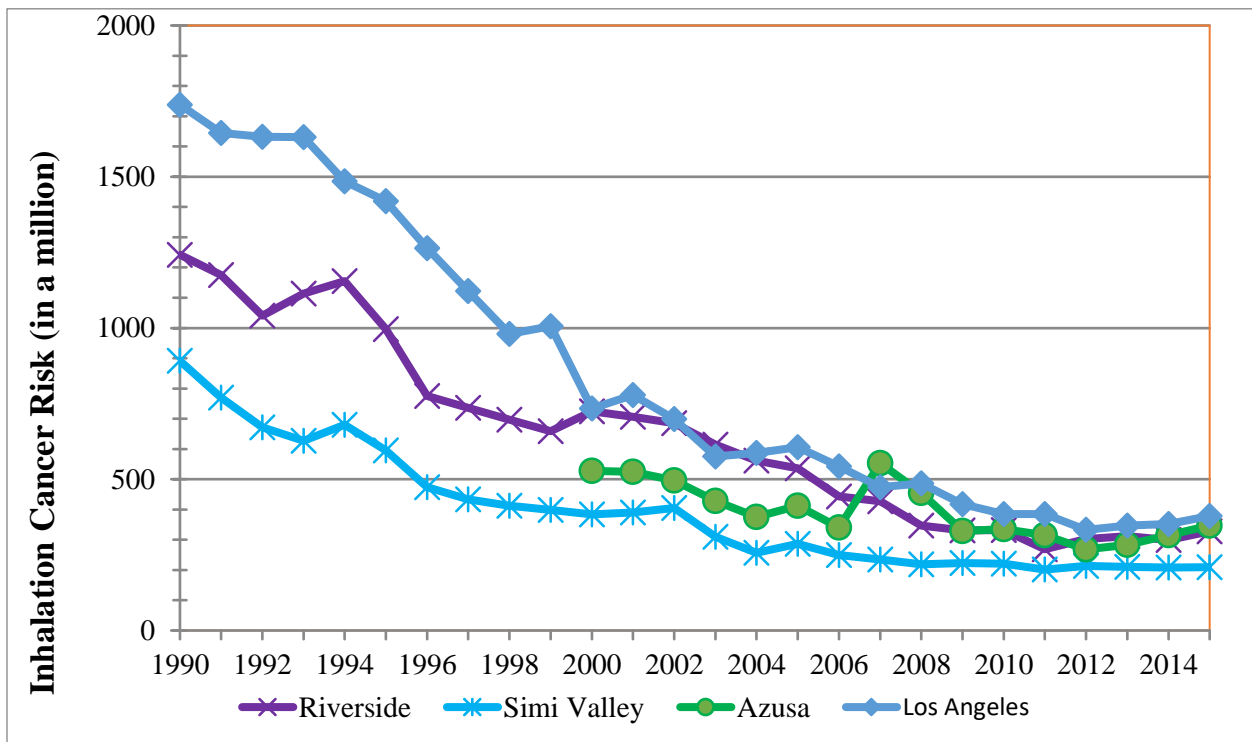


Figure B-2b - Trends in Inhalation Cancer Risks in the Basin (1990-2015)

²² Calculated with 2015 OEHHA HRA Guidelines, excluding cancer risks from DPM.

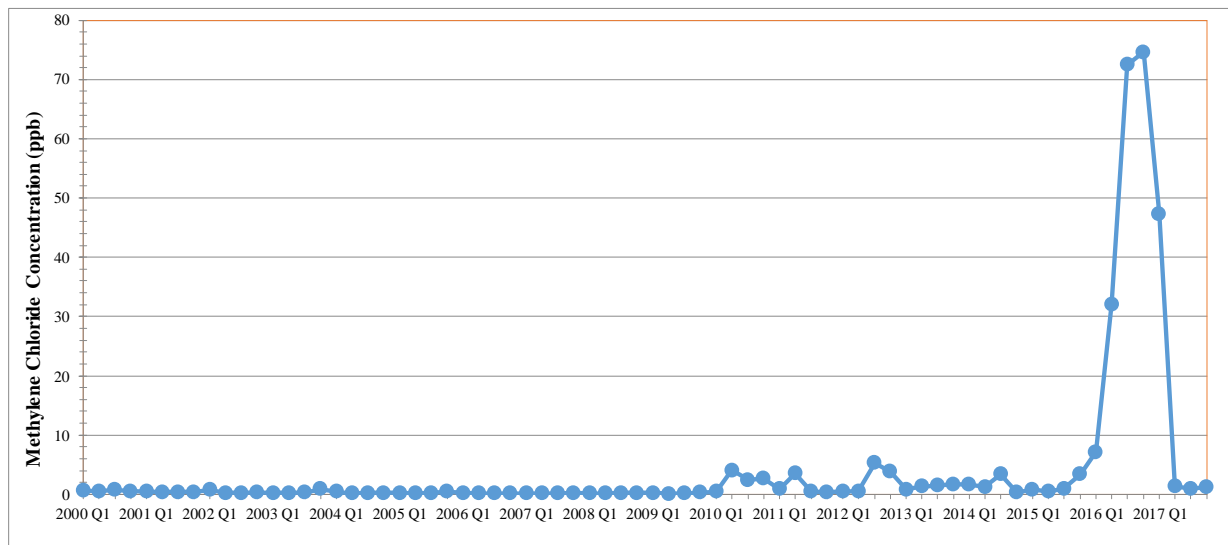


Figure B-2c – Methylene Chloride Monitored Concentrations at Riverside Station, Averaged by Quarter (2000 to 2017)

Azusa station started in 1995 as one of the Photochemical Assessment Monitoring Stations (PAMS) network aimed at determining speciated hydrocarbon ozone precursor compounds in ambient air. On October 17, 2006, U.S. EPA issued final amendments to PAMS monitoring requirements in 40 CFR Code 58. On July 1, 2009, to address these amendments, and with site-specific observations from the PAMS network assessment project, Azusa station was reclassified from Type 3 (maximum ozone concentration site) to Type 2 (maximum ozone precursor emissions impact site or above 8-hour ozone). The proposed change addressed the National PAMS Network Assessment that Azusa has high Volatile Organic Compounds (VOC) and Oxides of Nitrogen (NOX) concentrations, with lower ozone concentrations. The site now more closely resembles a Type 2 ozone precursor site.

The reduction in cancer risk at the Azusa station is primarily from reductions in ambient concentrations of benzene and 1,3-butadiene. Benzene accounts for 50 percent of the cancer risk reduction and 1,3-butadiene accounts for 46 percent of the cancer risk reduction.

The cancer risk reductions shown in Figure B-2a occurred despite significant increases in population and vehicle activity. As shown in Table B-2, the population increased by 38 percent since 1990 and daily vehicle miles traveled (VMT), vehicle population, and daily fuel consumption increased by 43, 54, and 31 percent, respectively.

Table B-2 - Change in Population and Vehicle Activity in the Basin Since 1990

Activity Variable	1990	2017	Percentage Increase
Population	13,083,594	18,098,716	38.3%
Daily Vehicle Miles Traveled (1,000 mile per day)	282,561	403,020	42.6%
Vehicle Population	7,547,354	11,582,730	53.5%
Daily Fuel Consumption (1,000 gal per day)	18,338	24,067	31.2%

Source: http://www.arb.ca.gov/app/emsinv/trends/ems_trends.php.

The relative importance of each of the toxics at the four monitoring stations is illustrated in Figure B-3a below. These ranges do not represent all potential exposures, and some areas near facilities with toxic air contaminant emissions may have higher cancer risks. The range of cancer risks for the four sites analyzed here are shown for the most recently available three-year period (2014 to 2016). As mentioned previously, the inhalation cancer risk estimated for 2016 includes the high measurements for methylene chloride at the Riverside station that are inconsistent with all other readings taken at this station. To better demonstrate the effect of the 2016 Riverside methylene chloride measurements on the inhalation cancer risks, Figure B-3b is provided to show the three-year period before 2016 (2013 to 2015).

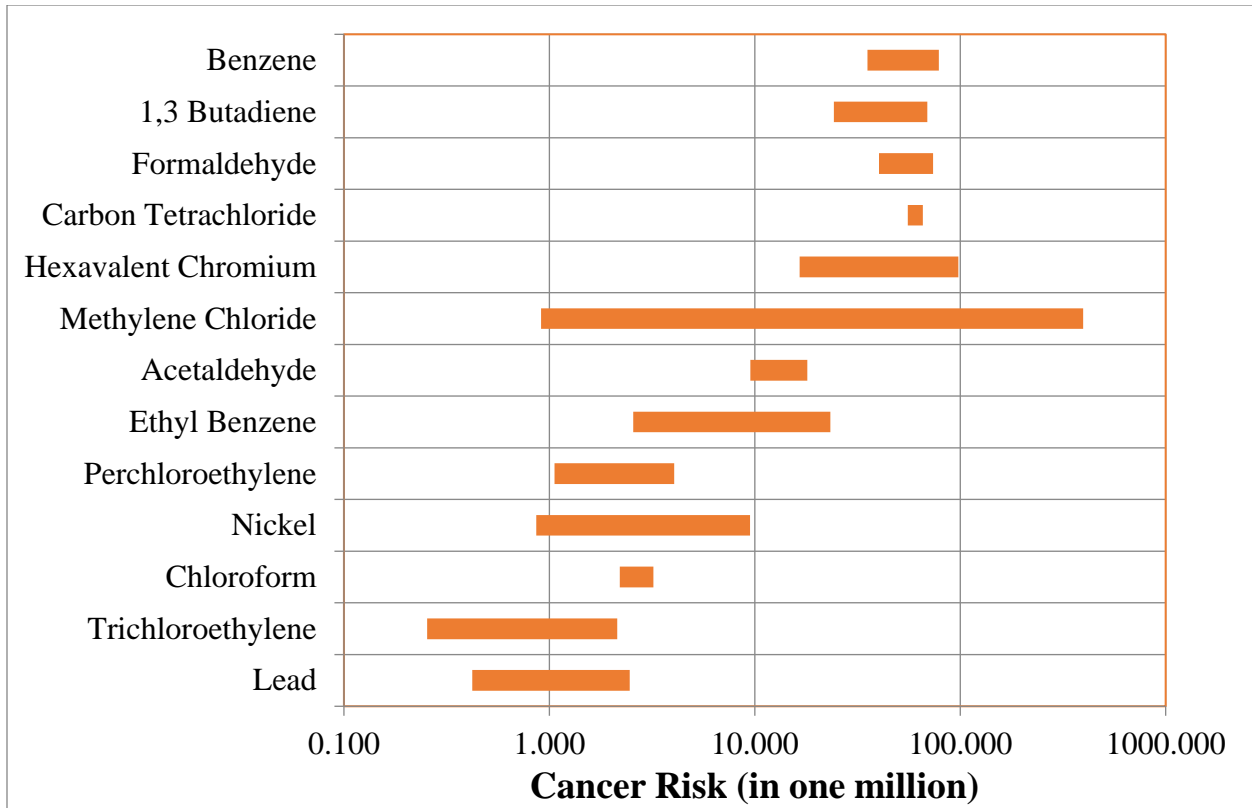


Figure B-3a - Inhalation Cancer Risks in the Basin (2014 to 2016) (excluding DPM)

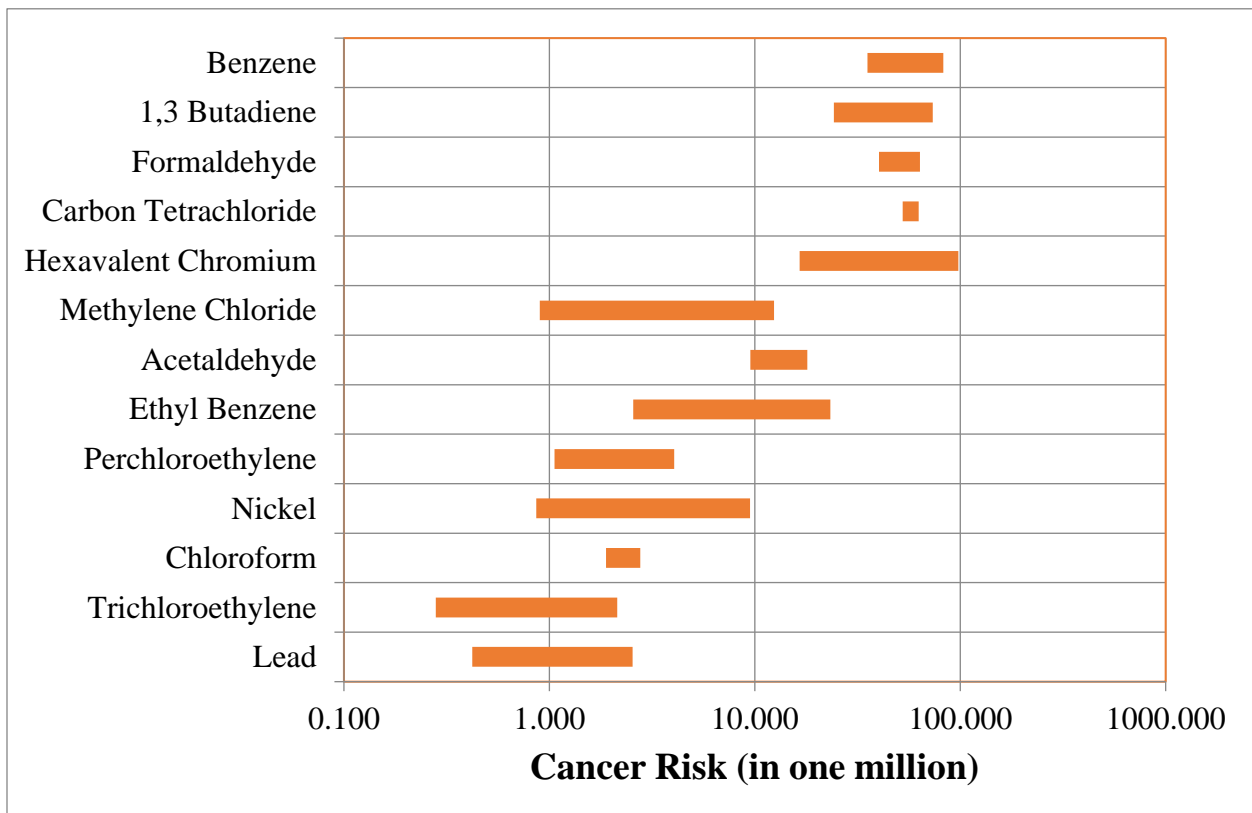


Figure B-3b - Inhalation Cancer Risks in the Basin (2013-2015) (excluding DPM)

Benzene, 1,3-butadiene, formaldehyde, carbon tetrachloride, hexavalent chromium, methylene chloride, acetaldehyde, and ethyl benzene are the largest contributors to the inhalation cancer risks, contributing individually from approximately 0.9 to 396 in a million. The ambient carbon tetrachloride concentrations observed in the Basin are not from a local source of emissions but represent background conditions. Note that there is little variability in cancer risks attributable to carbon tetrachloride as indicated by its short bar in Figure B-3a. In fact, there is little variability statewide in carbon tetrachloride concentrations, with concentrations varying by less than ten percent. Perchloroethylene, chloroform, and nickel each contribute between approximately 0.9 and 9.5 in a million and trichloroethylene and lead contribute on average about two in a million to the inhalation cancer risks.

As demonstrated in the series of MATES conducted by SCAQMD staff, DPM is by far the largest contributor to inhalation cancer risks observed in the Basin. The MATES IV study attributed about 68 percent of the inhalation cancer risks to DPM based on emissions from 2012,²³ compared to 84 percent in MATES III based on emissions in 2005.²⁴ The total cancer risks shown in Figures B-2 and B-3 therefore represent only about 32 percent of the population weighted inhalation cancer risks found in the MATES IV study.

The range of non-cancer chronic risks for the four sites analyzed here are shown in Figure B-4a for the most recently available three-year period (2014 to 2016). For each toxic air contaminant, the ratio of the observed concentration to the pollutant's chronic REL is shown. Ratios less than one indicate that the observed concentrations are less than OEHHA's defined RELs, and are not anticipated to result in adverse non-cancer health effects in the general population, including sensitive subpopulations. Ratios greater than one indicate the potential for adverse health effects.

Figure B-4b shows the non-cancer chronic risks for the years 2013 to 2015, which excludes the unusually high 2016 Riverside methylene chloride measurements. The range for non-cancer chronic risks for methylene chloride is noticeably smaller in Figure B-4b than in Figure B-4a.

²³ See page ES-2 of the Executive Summary which is available at:

<http://www.aqmd.gov/docs/default-source/air-quality/air-toxic-studies/mates-iv/mates-iv-final-draft-report-4-1-15>

²⁴ See page ES-3 of the Executive Summary which is available at:

<http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-iii/mates-iii-final-report>

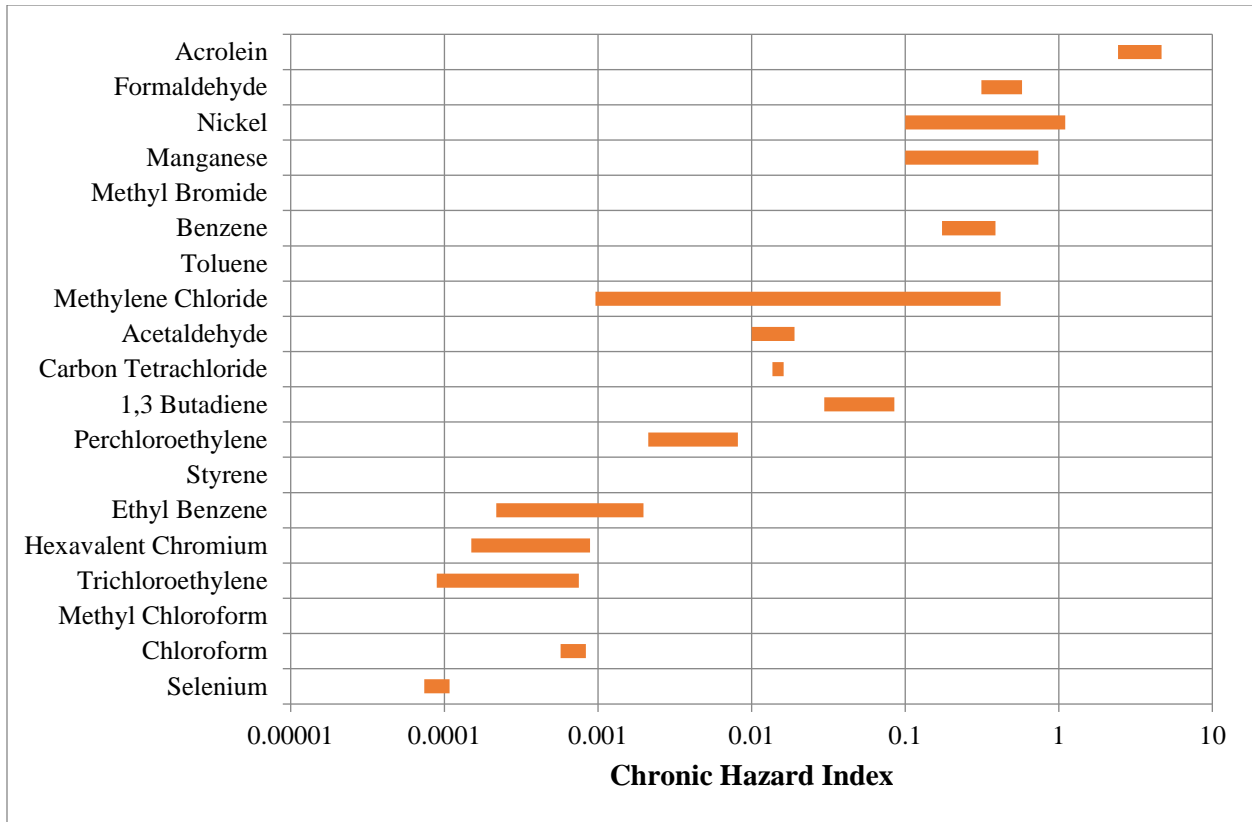


Figure B-4a - Non-cancer Chronic Risks in the Basin (2014-2016)

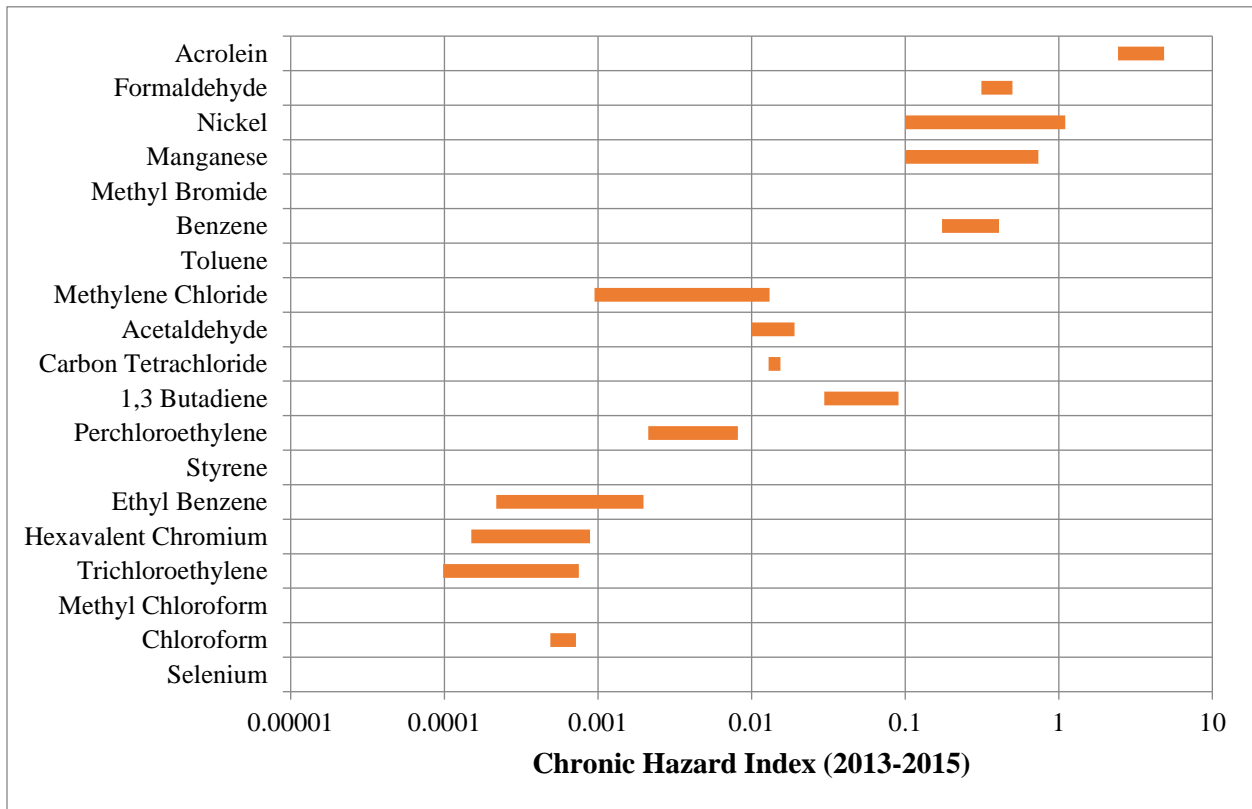


Figure B-4b - Non-cancer Chronic Risks in the Basin (2013-2015)

Note that acrolein, a respiratory irritant, is the only toxic air contaminant in which ambient concentrations are above its REL throughout the state and thus may partially reflect general background conditions. However, it should be noted that acrolein is well known to be difficult to measure with current techniques, and therefore, there is considerable uncertainty and data quality issues associated with these measurements.²⁵ At best, acrolein monitoring data should be considered as a rough indicator, not accurate enough to be compared to health benchmarks. Acrolein emissions can better be estimated using computer modeling methods.

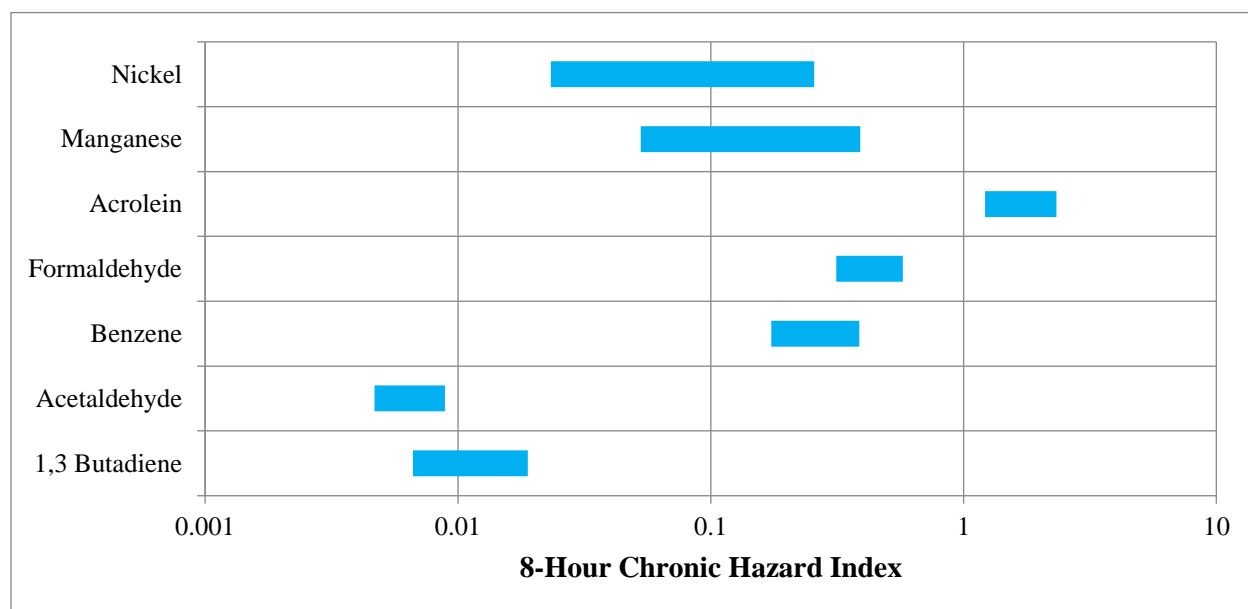


Figure B-5 - Non-cancer 8-Hour Chronic Risks in the Basin 2014 to 2016

The 2015 OEHHA HRA Guidelines includes methodology for estimating an 8-hour chronic HI using 8-hour REL developed for this purpose. The 8-hour RELs were developed only for repeated, chronic daily 8-hour exposures (e.g. a typical worker or resident exposed to a facility that operates equal to or more than 8 hours per day and 5 days per week). The 8-hour chronic HI is based upon the daily average 8-hour exposure only for those chemicals with 8-hour chronic RELs. The range of non-cancer 8-hour chronic health risks for the four sites analyzed here are shown above in Figure B-5 for the most recently available three-year period (2014 to 2016). Methylene chloride does not have an 8-hour REL as defined by OEHHA and does not affect the 8-hour chronic hazard index.

For each toxic air contaminant, the ratio of the observed concentration to the pollutant's chronic REL is shown. Ratios less than one indicate that the observed concentrations are less than

²⁵ R. Schulte-Ladbeck, et al. "Characterization of chemical interferences in the determination of unsaturated aldehydes using aromatic hydrazine reagents and liquid chromatography." *J. Environ. Monit.*, 2001, 3, 306–310.
 Ho, S.S.H., et al. "Unsuitability of using the DNPH-coated solid sorbent cartridge for determination of airborne unsaturated carbonyls." *Atmospheric Environment*. 2011 45, 261-265.
 Herrington, J.S., et al. "Concerns regarding 24-h sampling for formaldehyde, acetaldehyde, and acrolein using 2,4-dinitrophenylhydrazine (DNPH)-coated solid sorbents." *Atmospheric Environment* 2012, 55, 179-184.
 Grosjean, D., "Ambient Levels of Formaldehyde, Acetaldehyde, and Formic Acid in Southern California: Results of a One-Year Base-Line Study," *Environmental Science & Technology*, Vol 25, 1991, pp. 710–715.

OEHHA's defined RELs, and are not anticipated to result in non-cancer health effects in the general population, including sensitive subpopulations. Ratios greater than one indicate the potential for adverse health effects. As stated above, acrolein is the only toxic air contaminant in which ambient concentrations are above its REL. It should be noted that the ambient concentrations of acrolein are above its REL throughout the state and thus may partially reflect general background conditions.

APPENDIX C - LIST OF ACRONYMS AND ABBREVIATIONS

Acronym	Description
AB 2588	Air Toxics “Hot Spots” Information and Assessment Act
AER	Annual Emissions Reporting
ATIR	Air Toxics Inventory Report
CARB	California Air Resources Board
CCP	Clean Communities Plan
CEMS	Continuous Emissions Monitoring System
CEQA	California Environmental Quality Act
DPM	Diesel Particulate Matter
EIM	Emission Inventory Module
EIR	Environmental Impact Report
H&S	Health and Safety
HARP	Hotspots Analysis and Reporting Program
HI	Hazard Index
HRA	Health Risk Assessment
MATES	Multiple Air Toxics Exposure Study
MICR	Maximum Individual Cancer Risk
NAAQS	National Ambient Air Quality Standard
NATA	National Air Toxics Assessment
OEHHA	Office of Environmental Health Hazard Assessment
PAMS	Photochemical Assessment Monitoring Stations
REL	Reference Exposure Levels
RRP	Risk Reduction Plan
SCAQMD	South Coast Air Quality Management District
U.S. EPA	United States Environmental Protection Agency
VRRP	Voluntary Risk Reduction Plan

ATTACHMENT 2



South Coast Air Quality Management District

**Facility Prioritization Procedure
For
the AB 2588 Program**

July 2018

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I. INTRODUCTION

The Air Toxics "Hot Spots" Information and Assessment Act of 1987 (commonly known as AB 2588) established a statewide program for the inventory of air toxics emissions from individual facilities as well as requirements for risk assessment and public notification of potential health risks. AB 2588 requires the South Coast Air Quality Management District (SCAQMD) to designate high, intermediate, and low priority categories and include each facility within the appropriate category based on its individual priority score. In establishing priorities, SCAQMD is to consider the potency, toxicity, quantity and volume of hazardous materials released from the facility; the proximity of the facility to potential receptors, including, but not limited to, hospitals, schools, daycare centers, worksites and residences; and any other factors that SCAQMD finds and determines may indicate that the facility may pose a significant risk to receptors.

II. FACILITY PRIORITIZATION PROCEDURE

This document describes the facility prioritization procedure utilized by SCAQMD (SCAQMD Procedure), which is consistent with the California Air Pollution Control Officers Association's (CAPCOA) August 2016 Facility Prioritization Guidelines (CAPCOA Guidelines)¹ developed by the Toxics and Risk Managers Committee (TARMAC).

The CAPCOA Guidelines primarily rely on four parameters to prioritize facilities: emissions, toxicity, the proximity to potential receptors, and stack height. While the SCAQMD Procedure is consistent with the CAPCOA Guidelines, several refinements have been made over the history of SCAQMD's AB 2588 Program. In September 1990, SCAQMD refined the original CAPCOA Guidelines to include adjustment factors for receptor proximity, exposure period, and averaging times in addition to the treatment of multipathway pollutants. In August 2004, SCAQMD revised its Procedure to accommodate the use of cancer potency factors (instead of unit risk factors) to allow for daily breathing rate and body weight variations as well as revised multipathway factors for resident and workers. In March 2011, the SCAQMD Procedure was revised to include updated toxicity criteria. In June 2015, the SCAQMD Procedure was updated to incorporate the revised risk calculation methodologies in the 2015 Office of Environmental Health Hazard Assessment (OEHHA) Guidance Manual for Preparation of Health Risk Assessments.

In November 2016, the SCAQMD Procedure was revised to further streamline and refine the prioritization methodology for better characterization of the priority score for each facility before an Air Toxics Inventory Report (ATIR) or a Voluntary Risk Reduction Plan (VRRP) is requested. The 2016 SCAQMD Procedure used the local meteorology from all available SCAQMD meteorological stations (Version 8 meteorological data) for every facility and evaluated risks at the actual closest receptor locations as well as receptors located in the worst case wind direction (e.g., downwind). The current (July 2018) SCAQMD Procedure incorporates the Version 9 meteorological data and simplifies calculation of a facility's non-cancer acute score.

A facility receives scores for four health endpoints: cancer, non-cancer chronic, non-cancer chronic 8-hr, and non-cancer acute. The cancer, non-cancer chronic, non-cancer chronic 8-hr

¹ <http://www.capcoa.org/wp-content/uploads/2016/08/CAPCOA%20Prioritization%20Guidelines%20-%20August%202016%20FINAL.pdf>

health endpoints are evaluated for four receptors for each facility: the absolute closest sensitive receptor and worker receptor, and the closest sensitive receptor and worker receptor in the worst case wind direction. The non-cancer acute health endpoint is evaluated at a single receptor only in the worst case wind direction. Unlike the sensitive and worker receptor, this single receptor can be at the facility fenceline due to a potential for one-hour exposure duration. Every facility therefore receives 13 different scores: three health endpoints (cancer, non-cancer chronic and non-cancer chronic 8 hour) at four receptors, and one non-cancer acute health endpoint at a single receptor. The highest score is used to determine the Priority Score (PS).

Three categories are used in the ranking: high priority, intermediate priority and low priority. Based on the priority score, facilities designated as high priority are required to submit either an ATIR or VRRP under the AB 2588 Program. Facilities ranked with intermediate priority are considered to be District Tracking facilities, which are then required to submit complete an air toxics inventory once every four years. Facilities ranked with low priority are potentially exempt from reporting. Due to the very conservative nature of the screening SCAQMD Procedure used for prioritization, and consistent with CAPCOA’s Guidelines, a priority score of 10 may be considered similar to a calculated cancer risk of 100 per million or a HI of 10. The same emissions profile evaluated in a more detailed Health Risk Assessment (HRA) using actual stack parameters and more detailed dispersion modeling will likely result in much lower calculated risks. The following table summarizes thresholds used to prioritize facilities:

Table 1: Prioritization Categories

Priority Score	Category
PS > 10	High Priority
1 < PS ≤ 10	Intermediate Priority
PS ≤ 1	Low Priority

Facilities subject to the AB 2588 Program are required to submit a detailed list of their air toxic emissions every four years (referred to as a quadrennial update). Based on their level of air toxic and criteria pollutant emissions, each year a different group of facilities will report a detailed list of its air toxic emissions. Upon initial prioritization of facilities, SCAQMD staff conducts auditing to confirm the distances reported to sensitive receptors and workers, and that the reported emissions are consistent with expected levels considering trends and facility changes such as new or modified permitted equipment or pollution controls, and comparing the priority score results with the last (HRA) or Risk Reduction Plan (Voluntary or Traditional), if applicable. This additional information obtained through priority score auditing will often negate the need to ask for additional reports such as an ATIR. If, however, the priority score remains high, the facility is asked to prepare an ATIR or a VRRP under the AB 2588 Program.

A. Calculation of Cancer Score

The scores for residential and worker cancer effects are calculated as follows:

$$S_{r,cancer} = \sum \left(\frac{E_c}{CP_c} \right) \times MP_{c,r} \times RP_r \times 677.40 \times 10^{-1}$$

$$S_{w,cancer} = \sum \left(\frac{E_c}{CP_c} \right) \times MP_{c,w} \times RP_w \times 55.86 \times 10^{-1}$$

Where;

- $S_{r,cancer}$ = Total cancer score (summed for all carcinogens separately, by the residential receptor and worker receptor)
- $S_{w,cancer}$ = Total cancer score (summed for all carcinogens separately, by the residential receptor and worker receptor)
- c = Specific carcinogen
- r = Residential receptor
- w = Worker receptor
- E_c = Annual emissions of carcinogen, c $\left(\frac{ton}{year} \right)$
- CP_c = Cancer potency of carcinogen, c $(mg/kg-day)^{-1}$
- $MP_{c,r}$ = Multipathway adjustment factor of carcinogen, c ; there are separate multipathway factors for residential receptor and worker receptor for the applicable exposure duration (see Table 3.1 of *Permit Application Package "N"*)
- $MP_{c,w}$ = Multipathway adjustment factor of carcinogen, c ; there are separate multipathway factors for residential receptor and worker receptor for the applicable exposure duration (see Table 3.1 of *Permit Application Package "N"*)
- RP_r = Receptor proximity adjustment factor for residential receptor and worker receptor, $\chi/Q \left(\frac{\mu g}{m^3} / \frac{ton}{year} \right)$
- RP_w = Receptor proximity adjustment factor for residential receptor and worker receptor, $\chi/Q \left(\frac{\mu g}{m^3} / \frac{ton}{year} \right)$
- WAF = Worker Adjustment Factor (dimensionless)
- 677.40 = Residential Combined Exposure Factor that accounts for age-specific breathing rate, age specific factor, exposure duration, exposure frequency, and averaging time from SCAQMD's *Risk Assessment Procedures for Rules 1401, 1401.1 and 212*
- 55.86 = Worker Combined Exposure Factor that accounts for age-specific breathing rate, age specific factor, exposure duration, exposure frequency, and averaging time from SCAQMD's *Risk Assessment Procedures for Rules 1401, 1401.1 and 212*
- 10^{-1} = Scalar to adjust priority score to 1-10 scale

Annual Emissions:

Annual emissions of carcinogens are taken from the Toxic Air Contaminants (TAC)/Ozone Depleting Compounds (ODC) Emissions and Fees Summary of the Annual Emission Reporting (AER) Program. Each substance has a degree of accuracy associated with them that is a de-minimis emission level for reporting. As a result, facility-wide air toxic emissions greater than one-half of their corresponding degree of accuracy are inventoried and reported. Conversely, total facility air toxic emissions less than one-half of their corresponding degree of accuracy levels are not considered in the prioritization. The carcinogens and associated degree of accuracy levels are

listed in the *Supplemental Instructions Reporting Procedures for AB 2588 Facilities for Reporting their Quadrennial Air Toxics Emissions Inventory*.²

Cancer Potency:

The Cancer Potency (CP) factor is a measure of the cancer potency of a carcinogen. The CP is the estimated probability that a person will contract cancer as a result of a daily inhalation of 1 milligram of the carcinogen per kilogram of body weight continuously over a period of 70 years. The cancer potencies used in this Procedure are published by the Office of Environmental Health Hazard Assessment (OEHHA).³

Multipathway Adjustment Factor:

The multipathway (MP_c) adjustment factor is used for carcinogens that may contribute to risk from exposure pathways other than inhalation. These carcinogens deposit on the ground in particulate form and contribute to risk through ingestion of soil or backyard garden vegetables or through other routes. This factor is used to account for additional risks from exposure through non-inhalation pathways. The MP_c adjustment factors for specific carcinogens have been developed by SCAQMD staff by using the Health Risk Assessment Standalone Tool (RAST) developed by the California Air Resources Board (CARB).⁴ The MP_c factors also satisfy the requirements of the SCAQMD's *Risk Assessment Procedures for Rules 1401, 1401.1 and 212*.⁵ The substances and associated MP_c adjustment factors for worker and residents for longest exposure duration listed in Table 3.1 of *Permit Application Package "N"*⁶ or the most current version of the document. For carcinogens that only affect the inhalation pathway, the MP_c adjustment factor is set to one.

Receptor Proximity Adjustment Factor:

There are four Receptor Proximity (RP) adjustment factors calculated for each facility for cancer score. They are calculated based on the distances from the facility to the nearest sensitive (e.g., residential) and worker receptors regardless of wind direction, and the nearest sensitive and worker receptors in the worst case wind direction. The receptors in the worst case wind direction are also evaluated in case the nearest receptors do not experience the highest risk. Receptor locations are off-site, where persons may be exposed to air toxic emissions from the facility. The receptor distance is defined as the closest distance between any major source of air toxic emissions at the facility and the property boundary of any one of the receptor locations. Consistent with the CAPCOA Guidelines, the minimum distance evaluated is 50 meters. The RP adjustment factors for every meteorological station⁷ using the Version 9 meteorological data at receptor locations of 50, 75, 100, 200, 300, 500, and 1000 meters are included in Tables 3 and 4 at the end of this

² http://www.aqmd.gov/docs/default-source/planning/risk-assessment/quadrennial_atir_procedure.pdf

³ The latest CP values can be obtained at <http://www.arb.ca.gov/toxics/healthval/healthval.htm>

⁴ www.arb.ca.gov/toxics/harp/harp.htm

⁵ <http://www.aqmd.gov/docs/default-source/permitting/rule-1401-risk-assessment/riskassessproc-v8-1.pdf>

⁶ www.aqmd.gov/docs/default-source/permitting/rule-1401-risk-assessment/riskassessproc-v8-1.pdf

⁷ Meteorological station information is available here:

www.aqmd.gov/home/air-quality/air-quality-data-studies/meteorological-data/data-for-aermod

guidance. These RP adjustment factors are (χ/Q) values derived from U.S. EPA's AERMOD air dispersion model utilizing a unitary emission rate of one ton per year exiting out of a 0.1 meter diameter stack that is 0.27 meters above a 4.0 meter tall building, with a velocity of 5 meters per second. Linear interpolation is used to determine the appropriate (χ/Q) for receptor locations located between the distances specified in Tables 3 and 4.

Worker Adjustment Factor:

The modeled annual average air concentration should be adjusted to the air concentration that the worker is actually exposed to if the source does not operate continuously. The Worker Adjustment Factor (WAF) is calculated with the following equation:

$$WAF = \frac{H_r}{H_{source}} \times \frac{D_r}{D_{source}}$$

Where,

- H_r = Number of hours per day the annual average residential air concentration is based on (always 24 hours)
- H_{source} = Number of hours the source operates per day
- D_r = Number of days per week the annual average residential air concentration is based on (always 7 days)
- D_{source} = Number of days the source operates per week

B. Calculation of Non-Cancer Score

For a toxic substance, non-cancer health effects can occur via acute, non-cancer 8-hour exposure, and/or annual chronic exposure. All of these non-cancer effects are used in the calculation of a facility's priority score. For each substance associated with acute, non-cancer 8-hour and chronic toxicity, SCAQMD staff calculates separate scores using the formulas shown below.

Non-Cancer Chronic Score:

For a facility which emits pollutants with known non-cancer chronic health effects, the scores for non-cancer chronic effects for residential receptor and worker receptor are calculated as follows:

$$S_{r,chronic} = \sum \left(\frac{E_t}{REL_{t,chronic}} \right) \times MP_{t,r} \times RP_r$$

$$S_{w,chronic} = \sum \left(\frac{E_t}{REL_{t,chronic}} \right) \times MP_{t,w} \times RP_w$$

Where;

- $S_{r, chronic}$ = Total chronic score (summed for all substances with non-cancer chronic effects separately, by the residential receptor and worker receptor)
- $S_{w, chronic}$ = Total chronic score (summed for all substances with non-cancer chronic effects separately, by the residential receptor and worker receptor)
- t = Toxic substance
- r = Residential Receptor
- w = Worker Receptor

E_t	=	Annual emissions of substance, t (ton/year)
$REL_{t, \text{chronic}}$	=	Chronic reference exposure level of toxic substance, t ($\mu\text{g}/\text{m}^3$)
$MP_{t,r}$	=	Multipathway adjustment factor of carcinogen, c; there are separate multipathway factors for residential receptor and worker receptor as shown in Table 3.2 of <i>Permit Application Package "N"</i>
$MP_{t,w}$	=	Multipathway adjustment factor of carcinogen, c; there are separate multipathway factors for residential receptor and worker receptor as shown in Table 3.2 of <i>Permit Application Package "N"</i>
RP_r	=	Receptor proximity adjustment factor for residential receptor and for worker receptor, χ/Q
RP_w	=	Receptor proximity adjustment factor for residential receptor and for worker receptor, χ/Q
WAF	=	Worker Adjustment Factor (dimensionless)

Non-Cancer 8-Hour Score:

For a facility which emits pollutants with known non-cancer 8-hour health effects, the scores for non-cancer 8-hour effects for residential receptor and worker receptor are calculated as follows:

$$S_{r,8-hr} = \sum \left(\frac{E_t}{REL_t} \right) \times (WAF) \times RP_r$$

$$S_{w,8-hr} = \sum \left(\frac{E_t}{REL_t} \right) \times (WAF) \times RP_w$$

Where;

$S_{w, 8-hr}$	=	Total 8-hour score (summed for all substances with non-cancer 8-hour effects separately, by the residential receptor and worker receptor)
$S_{r, 8-hr}$	=	Total 8-hour score (summed for all substances with non-cancer 8-hour effects separately, by the residential receptor and worker receptor)
t	=	Toxic substance
r	=	Residential Receptor
w	=	Worker Receptor
E_t	=	Annual emissions of substance, t (ton/year)
$REL_{t, 8-hr}$	=	8-hour reference exposure level of toxic substance, t ($\mu\text{g}/\text{m}^3$)
RP_r	=	Receptor proximity adjustment factor for residential receptor and worker receptor, χ/Q
RP_w	=	Receptor proximity adjustment factor for residential receptor and worker receptor, χ/Q
WAF	=	Worker Adjustment Factor (dimensionless)

Non-Cancer Acute Score:

For a facility which emits pollutants with known non-cancer acute health effects, the score for non-cancer acute effects is calculated as follows:

$$S_{acute} = \sum \left(\frac{E_t}{REL_t} \right) \times RP$$

Where;

- S_{acute} = Total acute score (summed for all substances with non-cancer acute effects separately, by the residential receptor and worker receptor)
- t = Toxic substance
- E_t = Annual emissions of substance, t (tons/year)
- REL_t = Acute reference exposure level of toxic substance, t ($\mu\text{g}/\text{m}^3$)
- RP = Receptor proximity adjustment factor for hourly concentration, $\chi/Q \left(\frac{\mu\text{g}}{\text{m}^3} / \frac{\text{lb}}{\text{hr}} \right)$

Annual and Maximum Hourly Emissions:

Two different emissions rates are required for calculating the score for non-cancer health effects. The methodology for calculating the non-cancer score for chronic exposure requires annual emissions (tons/year) for each emitted pollutant whereas calculation of the non-cancer score for acute exposure requires maximum hourly emissions (lbs/hr) for each emitted pollutant. Maximum hourly emissions are obtained by dividing the annual emissions (lbs/yr) of the pollutant by the facility’s actual operating hours and then multiplied by a maximum hourly emission adjustment factor of 1.25. Annual emissions are taken from the Toxic Air Contaminants (TAC)/Ozone Depleting Compounds (ODC) Emissions and Fees Summary of the AER Program. As specified previously, emissions of specified substances which are below one-half of their corresponding degree of accuracy levels are neglected in the computation.

Reference Exposure Levels:

The Reference Exposure Level (REL) is used as an indicator of all potential adverse non-cancer health effects, and refers to a concentration level ($\mu\text{g}/\text{m}^3$) or dose (mg/kg-day) below which no adverse health effects are anticipated. The RELs used in this Procedure are published by OEHHA and CARB.⁸

MultiPathway Adjustment Factor:

The MultiPathway (MP_t) adjustment factor is used for substances that may contribute to non-cancer chronic risks from exposure pathways other than inhalation. The MP_t adjustment factors to evaluate the non-cancer chronic health endpoint for selected toxic pollutants can be found in Table 3.2 of *Permit Application Package “N”*⁹ or the most recent version of the document. There are separate MP factors for workers and residents. For non-cancer chronic health effects,

⁸ www.arb.ca.gov/toxics/healthval/healthval.htm

⁹ www.aqmd.gov/docs/default-source/permitting/rule-1401-risk-assessment/attachmentn-v8-1.pdf

substances that only affect the inhalation pathway, the MP_t adjustment factor is set to one (1.0). Note that for calculation of non-cancer scores, the MP_t is relevant for the chronic risk endpoint.

Receptor Proximity Adjustment Factor:

The Receptor Proximity (RP) adjustment factor is the same adjustment factor used in the calculation of the facility cancer score discussed previously. The RP adjustment factor for non-cancer acute score is based on a single distance from the facility to the nearest receptor regardless of wind direction. This receptor can be at the facility fenceline to account for the short one-hour exposure duration. To simplify calculation of the non-cancer acute score, the worst case wind direction is used for the single receptor distance.

Worker Adjustment Factor:

The modeled annual average air concentration should be adjusted to the air concentration that the worker is actually exposed to if the source does not operate continuously. This is the same adjustment factor used in the calculation of the facility cancer score discussed previously.

C. Facility Ranking

From the computed scores for cancer and all non-cancer effects, the priority score is the higher of the 13 scores, and serves as the basis for ranking a facility as described in Table 1.

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{ton}/\text{yr}}\right)$

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Azusa	10	7.655	4.130	2.495	0.662	0.305	0.124	0.038
Azusa	20	8.185	4.380	2.644	0.697	0.314	0.125	0.038
Azusa	30	9.407	4.858	2.922	0.755	0.326	0.127	0.039
Azusa	40	11.768	5.819	3.451	0.839	0.344	0.130	0.039
Azusa	50	15.417	7.573	4.449	1.012	0.376	0.134	0.040
Azusa	60	19.640	10.129	6.051	1.362	0.438	0.138	0.042
Azusa	70	22.492	12.152	7.603	1.818	0.531	0.141	0.042
Azusa	80	23.252	12.525	7.756	1.823	0.523	0.140	0.042
Azusa	90	21.273	11.068	6.613	1.499	0.449	0.135	0.041
Azusa	100	17.572	8.821	5.267	1.211	0.403	0.130	0.039
Azusa	110	13.662	7.095	4.287	1.014	0.366	0.126	0.038
Azusa	120	11.066	5.917	3.579	0.882	0.342	0.124	0.038
Azusa	130	9.364	5.210	3.181	0.804	0.327	0.123	0.038
Azusa	140	8.441	4.825	2.970	0.765	0.320	0.122	0.038
Azusa	150	8.057	4.682	2.880	0.754	0.318	0.122	0.038
Azusa	160	8.287	4.711	2.882	0.744	0.315	0.122	0.038
Azusa	170	9.368	5.017	3.051	0.745	0.312	0.122	0.038
Azusa	180	11.449	5.814	3.522	0.796	0.314	0.123	0.038
Azusa	190	13.972	7.367	4.477	1.002	0.345	0.124	0.038
Azusa	200	15.740	8.619	5.377	1.257	0.396	0.124	0.038
Azusa	210	16.469	8.915	5.604	1.343	0.414	0.125	0.038
Azusa	220	15.942	8.355	5.212	1.214	0.394	0.124	0.038
Azusa	230	14.506	7.591	4.634	1.108	0.377	0.124	0.038
Azusa	240	13.186	6.929	4.249	1.038	0.366	0.123	0.038
Azusa	250	12.177	6.451	3.971	0.983	0.357	0.123	0.038
Azusa	260	11.477	6.059	3.696	0.926	0.347	0.123	0.038
Azusa	270	10.745	5.688	3.464	0.878	0.336	0.122	0.038
Azusa	280	10.081	5.306	3.213	0.822	0.329	0.123	0.038
Azusa	290	9.466	4.987	3.023	0.780	0.323	0.123	0.038
Azusa	300	9.034	4.727	2.860	0.755	0.320	0.123	0.038
Azusa	310	8.678	4.518	2.734	0.731	0.316	0.123	0.038
Azusa	320	8.409	4.328	2.614	0.702	0.311	0.122	0.038
Azusa	330	8.144	4.192	2.515	0.679	0.307	0.122	0.038
Azusa	340	7.869	4.102	2.454	0.665	0.305	0.123	0.038

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{ton}/\text{yr}}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Azusa	350	7.581	4.048	2.433	0.657	0.303	0.123	0.038
Azusa	360	7.509	4.042	2.435	0.648	0.301	0.123	0.038
Banning	10	1.834	1.222	0.794	0.236	0.114	0.047	0.015
Banning	20	1.908	1.295	0.862	0.258	0.121	0.049	0.015
Banning	30	2.357	1.502	1.021	0.311	0.141	0.054	0.016
Banning	40	3.748	2.120	1.414	0.431	0.192	0.072	0.020
Banning	50	6.731	3.677	2.381	0.697	0.300	0.110	0.030
Banning	60	12.021	6.517	4.184	1.201	0.479	0.170	0.050
Banning	70	18.569	10.388	6.762	1.877	0.696	0.238	0.073
Banning	80	23.911	13.741	8.851	2.448	0.863	0.284	0.090
Banning	90	24.235	14.033	9.124	2.534	0.857	0.284	0.091
Banning	100	19.437	10.881	6.968	1.936	0.700	0.238	0.074
Banning	110	12.291	6.678	4.358	1.259	0.484	0.171	0.051
Banning	120	6.728	3.784	2.515	0.763	0.313	0.112	0.032
Banning	130	3.735	2.316	1.595	0.485	0.205	0.075	0.021
Banning	140	2.488	1.668	1.146	0.345	0.151	0.057	0.017
Banning	150	2.022	1.405	0.943	0.281	0.127	0.050	0.015
Banning	160	1.926	1.306	0.859	0.255	0.118	0.048	0.015
Banning	170	2.045	1.297	0.842	0.248	0.116	0.048	0.015
Banning	180	2.287	1.365	0.885	0.258	0.119	0.049	0.015
Banning	190	2.669	1.531	0.977	0.284	0.128	0.052	0.016
Banning	200	3.136	1.796	1.153	0.334	0.144	0.056	0.017
Banning	210	3.608	2.089	1.359	0.396	0.162	0.061	0.019
Banning	220	3.983	2.286	1.496	0.433	0.175	0.065	0.020
Banning	230	4.178	2.394	1.558	0.447	0.181	0.067	0.021
Banning	240	4.318	2.447	1.596	0.467	0.188	0.068	0.021
Banning	250	4.531	2.516	1.634	0.469	0.191	0.070	0.021
Banning	260	5.129	2.730	1.712	0.491	0.202	0.074	0.022
Banning	270	5.788	3.128	1.940	0.539	0.217	0.080	0.024
Banning	280	6.033	3.351	2.105	0.568	0.226	0.084	0.026
Banning	290	5.481	3.033	1.924	0.531	0.214	0.079	0.024
Banning	300	4.348	2.337	1.439	0.401	0.176	0.068	0.020
Banning	310	3.214	1.688	1.048	0.309	0.143	0.056	0.017
Banning	320	2.526	1.380	0.879	0.264	0.124	0.050	0.015
Banning	330	2.247	1.278	0.809	0.242	0.116	0.047	0.015

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{ton}/\text{yr}}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Banning	340	2.122	1.237	0.784	0.235	0.113	0.047	0.014
Banning	350	2.005	1.217	0.775	0.232	0.112	0.046	0.014
Banning	360	1.895	1.206	0.773	0.230	0.112	0.047	0.014
Burbank Arpt.	10	11.332	5.792	3.623	0.913	0.379	0.145	0.043
Burbank Arpt.	20	8.178	4.565	2.856	0.765	0.327	0.124	0.037
Burbank Arpt.	30	6.762	3.898	2.459	0.670	0.289	0.110	0.033
Burbank Arpt.	40	6.150	3.582	2.261	0.620	0.269	0.104	0.032
Burbank Arpt.	50	6.033	3.514	2.211	0.612	0.264	0.102	0.031
Burbank Arpt.	60	6.333	3.633	2.289	0.630	0.267	0.102	0.032
Burbank Arpt.	70	6.963	3.940	2.496	0.678	0.277	0.103	0.032
Burbank Arpt.	80	7.957	4.430	2.794	0.748	0.291	0.105	0.032
Burbank Arpt.	90	9.125	5.059	3.202	0.845	0.306	0.107	0.033
Burbank Arpt.	100	10.303	5.731	3.635	0.953	0.331	0.110	0.034
Burbank Arpt.	110	11.221	6.297	4.045	1.060	0.355	0.112	0.035
Burbank Arpt.	120	11.823	6.658	4.280	1.109	0.366	0.114	0.035
Burbank Arpt.	130	12.050	6.794	4.363	1.135	0.373	0.115	0.036
Burbank Arpt.	140	11.811	6.651	4.324	1.112	0.370	0.115	0.036
Burbank Arpt.	150	11.039	6.275	4.033	1.050	0.353	0.113	0.035
Burbank Arpt.	160	9.847	5.588	3.567	0.910	0.320	0.110	0.034
Burbank Arpt.	170	8.560	4.764	3.040	0.769	0.287	0.106	0.033
Burbank Arpt.	180	7.363	4.076	2.587	0.649	0.262	0.103	0.032
Burbank Arpt.	190	6.464	3.677	2.353	0.618	0.259	0.101	0.031
Burbank Arpt.	200	5.998	3.518	2.241	0.611	0.259	0.100	0.031
Burbank Arpt.	210	5.878	3.433	2.191	0.610	0.259	0.100	0.031
Burbank Arpt.	220	5.903	3.428	2.184	0.608	0.259	0.100	0.031
Burbank Arpt.	230	6.035	3.490	2.219	0.621	0.262	0.100	0.031
Burbank Arpt.	240	6.418	3.660	2.330	0.647	0.268	0.101	0.031
Burbank Arpt.	250	7.044	3.997	2.562	0.706	0.282	0.103	0.032
Burbank Arpt.	260	8.060	4.532	2.893	0.792	0.305	0.108	0.033
Burbank Arpt.	270	9.213	5.167	3.312	0.912	0.336	0.117	0.036
Burbank Arpt.	280	10.508	5.798	3.679	1.018	0.377	0.130	0.040
Burbank Arpt.	290	11.700	6.491	4.147	1.121	0.417	0.145	0.045
Burbank Arpt.	300	12.622	7.119	4.565	1.241	0.459	0.157	0.049
Burbank Arpt.	310	13.120	7.389	4.745	1.283	0.475	0.163	0.051
Burbank Arpt.	320	13.308	7.275	4.658	1.239	0.472	0.164	0.050

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{ton}/\text{yr}}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Burbank Arpt.	330	13.495	7.321	4.598	1.222	0.469	0.165	0.049
Burbank Arpt.	340	14.255	7.629	4.760	1.235	0.473	0.169	0.051
Burbank Arpt.	350	14.988	8.101	5.103	1.260	0.469	0.172	0.052
Burbank Arpt.	360	13.944	7.552	4.756	1.141	0.430	0.164	0.050
Central L.A.	10	12.372	6.586	4.039	0.938	0.339	0.123	0.038
Central L.A.	20	12.289	6.467	3.875	0.902	0.340	0.124	0.038
Central L.A.	30	11.924	5.981	3.543	0.826	0.331	0.125	0.038
Central L.A.	40	11.815	5.741	3.364	0.803	0.333	0.127	0.038
Central L.A.	50	12.475	6.033	3.491	0.832	0.342	0.129	0.039
Central L.A.	60	14.213	6.902	3.980	0.915	0.358	0.132	0.040
Central L.A.	70	15.835	8.054	4.797	1.097	0.389	0.134	0.040
Central L.A.	80	16.747	8.791	5.341	1.270	0.418	0.132	0.040
Central L.A.	90	16.248	8.525	5.164	1.241	0.403	0.128	0.039
Central L.A.	100	14.558	7.378	4.365	1.021	0.360	0.123	0.037
Central L.A.	110	12.095	6.124	3.664	0.867	0.331	0.119	0.036
Central L.A.	120	10.308	5.353	3.181	0.780	0.314	0.117	0.036
Central L.A.	130	9.083	4.925	2.961	0.743	0.307	0.116	0.036
Central L.A.	140	8.484	4.732	2.886	0.736	0.307	0.116	0.036
Central L.A.	150	8.314	4.691	2.854	0.733	0.305	0.116	0.036
Central L.A.	160	8.560	4.740	2.852	0.716	0.300	0.116	0.036
Central L.A.	170	9.425	4.964	2.949	0.707	0.296	0.116	0.036
Central L.A.	180	10.993	5.579	3.249	0.716	0.294	0.116	0.036
Central L.A.	190	13.850	6.802	3.965	0.811	0.307	0.117	0.036
Central L.A.	200	16.745	8.774	5.175	1.093	0.348	0.117	0.036
Central L.A.	210	18.447	10.200	6.465	1.563	0.440	0.119	0.036
Central L.A.	220	18.751	10.353	6.663	1.615	0.459	0.119	0.036
Central L.A.	230	17.517	9.238	5.554	1.226	0.378	0.118	0.036
Central L.A.	240	14.952	7.368	4.301	0.924	0.332	0.118	0.036
Central L.A.	250	12.125	6.014	3.509	0.811	0.319	0.118	0.036
Central L.A.	260	10.229	5.170	3.054	0.763	0.312	0.118	0.036
Central L.A.	270	8.895	4.619	2.770	0.714	0.302	0.117	0.036
Central L.A.	280	8.021	4.214	2.514	0.661	0.295	0.117	0.036
Central L.A.	290	7.386	3.938	2.354	0.631	0.290	0.117	0.036
Central L.A.	300	7.112	3.795	2.267	0.620	0.288	0.116	0.036
Central L.A.	310	7.202	3.756	2.243	0.620	0.288	0.116	0.036

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{ton}/\text{yr}}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Central L.A.	320	7.512	3.791	2.260	0.620	0.289	0.116	0.036
Central L.A.	330	8.099	3.972	2.318	0.625	0.290	0.117	0.036
Central L.A.	340	9.012	4.434	2.532	0.643	0.293	0.118	0.036
Central L.A.	350	10.412	5.156	3.023	0.698	0.300	0.119	0.037
Central L.A.	360	11.747	6.060	3.650	0.821	0.314	0.121	0.037
Chino Arpt.	10	5.753	3.228	2.054	0.567	0.248	0.098	0.030
Chino Arpt.	20	6.084	3.420	2.177	0.613	0.264	0.102	0.031
Chino Arpt.	30	6.923	3.855	2.468	0.709	0.296	0.111	0.034
Chino Arpt.	40	8.562	4.714	3.032	0.869	0.356	0.129	0.039
Chino Arpt.	50	10.966	6.170	3.972	1.128	0.453	0.161	0.048
Chino Arpt.	60	13.836	7.874	5.116	1.468	0.572	0.200	0.061
Chino Arpt.	70	16.230	9.205	5.999	1.713	0.662	0.231	0.071
Chino Arpt.	80	17.557	9.887	6.322	1.798	0.697	0.244	0.075
Chino Arpt.	90	17.074	9.626	6.221	1.799	0.674	0.237	0.074
Chino Arpt.	100	15.185	8.498	5.459	1.563	0.603	0.214	0.066
Chino Arpt.	110	12.693	7.089	4.625	1.339	0.517	0.181	0.056
Chino Arpt.	120	10.686	6.055	3.937	1.121	0.434	0.151	0.046
Chino Arpt.	130	9.506	5.441	3.523	0.991	0.378	0.130	0.040
Chino Arpt.	140	9.021	5.194	3.386	0.926	0.348	0.119	0.036
Chino Arpt.	150	8.892	5.224	3.395	0.925	0.339	0.115	0.035
Chino Arpt.	160	8.982	5.266	3.412	0.900	0.327	0.113	0.035
Chino Arpt.	170	9.348	5.314	3.445	0.876	0.315	0.114	0.035
Chino Arpt.	180	9.704	5.458	3.528	0.854	0.305	0.115	0.036
Chino Arpt.	190	9.906	5.628	3.654	0.910	0.322	0.115	0.036
Chino Arpt.	200	9.970	5.781	3.753	0.980	0.342	0.116	0.036
Chino Arpt.	210	10.149	5.869	3.831	1.029	0.355	0.116	0.036
Chino Arpt.	220	10.236	5.889	3.859	1.040	0.361	0.117	0.036
Chino Arpt.	230	10.103	5.835	3.794	1.032	0.361	0.117	0.036
Chino Arpt.	240	9.867	5.630	3.653	0.998	0.353	0.115	0.036
Chino Arpt.	250	9.539	5.387	3.483	0.954	0.342	0.113	0.035
Chino Arpt.	260	9.217	5.165	3.307	0.903	0.328	0.111	0.034
Chino Arpt.	270	8.730	4.891	3.134	0.862	0.315	0.108	0.034
Chino Arpt.	280	8.101	4.531	2.886	0.792	0.301	0.106	0.033
Chino Arpt.	290	7.450	4.180	2.680	0.743	0.290	0.104	0.032
Chino Arpt.	300	6.939	3.918	2.507	0.701	0.282	0.102	0.032

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{ton}/\text{yr}}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Chino Arpt.	310	6.544	3.687	2.350	0.662	0.272	0.101	0.031
Chino Arpt.	320	6.217	3.486	2.214	0.624	0.263	0.099	0.031
Chino Arpt.	330	5.949	3.341	2.114	0.599	0.255	0.098	0.030
Chino Arpt.	340	5.748	3.245	2.053	0.577	0.248	0.096	0.030
Chino Arpt.	350	5.677	3.175	2.015	0.559	0.243	0.096	0.030
Chino Arpt.	360	5.661	3.167	2.006	0.544	0.239	0.096	0.030
Desert Hot Springs Arpt.	10	4.354	2.431	1.555	0.432	0.190	0.075	0.023
Desert Hot Springs Arpt.	20	3.970	2.302	1.473	0.420	0.184	0.072	0.022
Desert Hot Springs Arpt.	30	3.797	2.206	1.411	0.407	0.179	0.070	0.022
Desert Hot Springs Arpt.	40	3.701	2.148	1.374	0.400	0.178	0.069	0.021
Desert Hot Springs Arpt.	50	3.694	2.173	1.387	0.403	0.179	0.070	0.021
Desert Hot Springs Arpt.	60	3.847	2.273	1.462	0.425	0.185	0.071	0.022
Desert Hot Springs Arpt.	70	4.157	2.456	1.594	0.462	0.196	0.074	0.023
Desert Hot Springs Arpt.	80	4.732	2.747	1.774	0.511	0.213	0.079	0.024
Desert Hot Springs Arpt.	90	5.562	3.187	2.054	0.592	0.238	0.087	0.026
Desert Hot Springs Arpt.	100	6.801	3.840	2.482	0.720	0.284	0.101	0.030
Desert Hot Springs Arpt.	110	8.561	4.809	3.148	0.922	0.361	0.126	0.037
Desert Hot Springs Arpt.	120	11.069	6.268	4.101	1.201	0.471	0.165	0.049
Desert Hot Springs Arpt.	130	14.284	8.182	5.390	1.606	0.624	0.217	0.067
Desert Hot Springs Arpt.	140	17.303	10.020	6.742	1.966	0.764	0.267	0.084
Desert Hot Springs Arpt.	150	18.909	11.211	7.462	2.183	0.831	0.291	0.092
Desert Hot Springs Arpt.	160	18.395	10.804	7.151	2.039	0.772	0.275	0.087
Desert Hot Springs Arpt.	170	16.201	9.106	5.982	1.676	0.629	0.232	0.072
Desert Hot Springs Arpt.	180	12.755	7.020	4.615	1.232	0.472	0.182	0.056
Desert Hot Springs Arpt.	190	9.216	5.194	3.495	0.961	0.376	0.139	0.042
Desert Hot Springs Arpt.	200	6.551	3.969	2.640	0.739	0.295	0.108	0.033
Desert Hot Springs Arpt.	210	5.056	3.080	2.042	0.578	0.237	0.088	0.026
Desert Hot Springs Arpt.	220	4.181	2.533	1.646	0.472	0.201	0.076	0.023
Desert Hot Springs Arpt.	230	3.721	2.244	1.438	0.419	0.183	0.070	0.022
Desert Hot Springs Arpt.	240	3.579	2.112	1.347	0.393	0.174	0.068	0.021
Desert Hot Springs Arpt.	250	3.598	2.083	1.325	0.389	0.173	0.067	0.021
Desert Hot Springs Arpt.	260	3.737	2.120	1.349	0.393	0.174	0.068	0.021
Desert Hot Springs Arpt.	270	3.984	2.227	1.409	0.410	0.179	0.069	0.021
Desert Hot Springs Arpt.	280	4.495	2.461	1.547	0.448	0.195	0.074	0.022
Desert Hot Springs Arpt.	290	5.383	2.886	1.818	0.515	0.221	0.083	0.025

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{ton}/\text{yr}}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Desert Hot Springs Arpt.	300	6.685	3.549	2.204	0.614	0.259	0.095	0.028
Desert Hot Springs Arpt.	310	7.973	4.304	2.668	0.724	0.298	0.109	0.032
Desert Hot Springs Arpt.	320	8.619	4.713	2.982	0.798	0.324	0.117	0.034
Desert Hot Springs Arpt.	330	8.325	4.544	2.828	0.765	0.311	0.113	0.033
Desert Hot Springs Arpt.	340	7.280	3.865	2.371	0.641	0.269	0.100	0.029
Desert Hot Springs Arpt.	350	6.004	3.149	1.973	0.543	0.231	0.088	0.026
Desert Hot Springs Arpt.	360	4.988	2.695	1.710	0.466	0.202	0.080	0.024
Fontana	10	7.494	4.115	2.563	0.683	0.303	0.121	0.037
Fontana	20	8.855	4.704	2.898	0.761	0.324	0.125	0.038
Fontana	30	11.533	5.937	3.617	0.926	0.365	0.134	0.040
Fontana	40	15.562	8.126	5.026	1.234	0.437	0.147	0.044
Fontana	50	19.933	10.796	6.792	1.686	0.542	0.162	0.049
Fontana	60	23.176	12.741	8.061	1.992	0.610	0.173	0.053
Fontana	70	23.590	12.904	8.148	1.994	0.611	0.174	0.053
Fontana	80	21.121	11.288	6.985	1.721	0.549	0.165	0.050
Fontana	90	16.789	8.798	5.392	1.345	0.455	0.150	0.045
Fontana	100	12.513	6.522	4.017	1.023	0.384	0.135	0.041
Fontana	110	9.378	5.146	3.230	0.843	0.339	0.125	0.038
Fontana	120	7.859	4.547	2.864	0.768	0.319	0.120	0.037
Fontana	130	7.303	4.358	2.750	0.743	0.311	0.118	0.037
Fontana	140	7.337	4.371	2.759	0.736	0.309	0.117	0.036
Fontana	150	7.708	4.541	2.847	0.760	0.312	0.118	0.037
Fontana	160	8.430	4.828	3.015	0.779	0.314	0.118	0.037
Fontana	170	9.722	5.301	3.320	0.809	0.315	0.120	0.037
Fontana	180	11.633	6.134	3.816	0.870	0.320	0.122	0.038
Fontana	190	13.771	7.425	4.636	1.069	0.359	0.125	0.039
Fontana	200	15.350	8.531	5.395	1.295	0.409	0.129	0.040
Fontana	210	16.031	8.854	5.651	1.391	0.432	0.130	0.040
Fontana	220	15.527	8.445	5.376	1.312	0.422	0.130	0.040
Fontana	230	14.113	7.684	4.829	1.214	0.404	0.127	0.039
Fontana	240	12.529	6.798	4.271	1.086	0.377	0.124	0.038
Fontana	250	11.047	5.960	3.732	0.960	0.352	0.121	0.037
Fontana	260	9.844	5.284	3.276	0.853	0.330	0.119	0.037
Fontana	270	8.866	4.779	2.965	0.791	0.317	0.118	0.037
Fontana	280	8.145	4.399	2.719	0.735	0.308	0.118	0.037

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{ton}/\text{yr}}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Fontana	290	7.656	4.132	2.553	0.696	0.301	0.117	0.036
Fontana	300	7.413	3.990	2.459	0.679	0.299	0.117	0.036
Fontana	310	7.299	3.930	2.423	0.674	0.298	0.117	0.036
Fontana	320	7.182	3.887	2.400	0.666	0.296	0.117	0.036
Fontana	330	6.994	3.840	2.364	0.659	0.295	0.117	0.036
Fontana	340	6.790	3.787	2.333	0.647	0.293	0.117	0.036
Fontana	350	6.737	3.769	2.332	0.634	0.289	0.117	0.036
Fontana	360	6.915	3.853	2.395	0.642	0.291	0.118	0.037
Fullerton Arpt.	10	14.907	7.850	4.869	1.151	0.419	0.151	0.046
Fullerton Arpt.	20	14.941	8.065	4.938	1.187	0.438	0.155	0.047
Fullerton Arpt.	30	14.503	7.826	4.858	1.206	0.443	0.155	0.047
Fullerton Arpt.	40	13.643	7.335	4.575	1.140	0.429	0.150	0.045
Fullerton Arpt.	50	12.538	6.744	4.157	1.057	0.405	0.143	0.043
Fullerton Arpt.	60	11.797	6.289	3.880	1.001	0.389	0.138	0.041
Fullerton Arpt.	70	11.901	6.313	3.890	0.982	0.381	0.136	0.041
Fullerton Arpt.	80	13.199	7.004	4.263	1.060	0.391	0.137	0.042
Fullerton Arpt.	90	14.408	7.940	4.970	1.260	0.422	0.138	0.042
Fullerton Arpt.	100	14.712	8.169	5.160	1.332	0.441	0.138	0.043
Fullerton Arpt.	110	13.702	7.465	4.668	1.166	0.405	0.135	0.042
Fullerton Arpt.	120	12.158	6.511	4.005	1.011	0.376	0.132	0.041
Fullerton Arpt.	130	10.988	5.933	3.686	0.949	0.361	0.128	0.039
Fullerton Arpt.	140	10.386	5.682	3.572	0.920	0.353	0.126	0.039
Fullerton Arpt.	150	10.036	5.570	3.488	0.910	0.348	0.124	0.038
Fullerton Arpt.	160	9.763	5.438	3.389	0.863	0.335	0.124	0.038
Fullerton Arpt.	170	9.561	5.283	3.292	0.818	0.323	0.123	0.038
Fullerton Arpt.	180	9.361	5.162	3.212	0.780	0.313	0.123	0.038
Fullerton Arpt.	190	9.236	5.121	3.201	0.792	0.319	0.123	0.038
Fullerton Arpt.	200	9.279	5.205	3.233	0.826	0.329	0.123	0.038
Fullerton Arpt.	210	9.637	5.369	3.360	0.874	0.338	0.124	0.038
Fullerton Arpt.	220	10.341	5.696	3.587	0.922	0.349	0.125	0.039
Fullerton Arpt.	230	11.447	6.264	3.915	0.996	0.364	0.126	0.039
Fullerton Arpt.	240	13.188	7.123	4.435	1.107	0.386	0.128	0.039
Fullerton Arpt.	250	15.160	8.254	5.182	1.275	0.419	0.131	0.040
Fullerton Arpt.	260	16.654	9.246	5.827	1.447	0.451	0.133	0.041
Fullerton Arpt.	270	16.389	9.138	5.809	1.480	0.451	0.133	0.041

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{ton}/\text{yr}}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Fullerton Arpt.	280	14.474	7.859	4.870	1.196	0.403	0.132	0.041
Fullerton Arpt.	290	11.838	6.284	3.871	0.964	0.363	0.130	0.040
Fullerton Arpt.	300	9.894	5.359	3.320	0.872	0.349	0.128	0.040
Fullerton Arpt.	310	9.050	5.052	3.162	0.842	0.344	0.128	0.039
Fullerton Arpt.	320	9.009	5.099	3.215	0.853	0.348	0.129	0.040
Fullerton Arpt.	330	9.506	5.418	3.397	0.893	0.356	0.131	0.040
Fullerton Arpt.	340	10.532	5.925	3.686	0.937	0.365	0.135	0.041
Fullerton Arpt.	350	12.203	6.577	4.133	1.008	0.378	0.139	0.043
Fullerton Arpt.	360	13.822	7.360	4.577	1.058	0.387	0.145	0.044
Hawthorne Arpt.	10	6.695	3.721	2.327	0.625	0.278	0.111	0.034
Hawthorne Arpt.	20	7.007	3.947	2.476	0.669	0.289	0.113	0.035
Hawthorne Arpt.	30	7.848	4.366	2.757	0.746	0.308	0.116	0.035
Hawthorne Arpt.	40	9.469	5.138	3.243	0.855	0.338	0.123	0.037
Hawthorne Arpt.	50	11.988	6.463	4.037	1.042	0.390	0.135	0.040
Hawthorne Arpt.	60	14.989	8.157	5.100	1.298	0.461	0.152	0.045
Hawthorne Arpt.	70	17.412	9.442	5.943	1.496	0.514	0.166	0.050
Hawthorne Arpt.	80	19.192	10.158	6.166	1.482	0.514	0.171	0.051
Hawthorne Arpt.	90	19.151	10.265	6.277	1.537	0.504	0.163	0.049
Hawthorne Arpt.	100	17.449	9.515	6.038	1.559	0.499	0.150	0.045
Hawthorne Arpt.	110	14.714	8.137	5.188	1.304	0.429	0.135	0.041
Hawthorne Arpt.	120	12.269	6.718	4.176	1.036	0.367	0.123	0.037
Hawthorne Arpt.	130	10.777	6.047	3.828	0.966	0.345	0.117	0.036
Hawthorne Arpt.	140	10.384	5.979	3.848	0.970	0.341	0.113	0.035
Hawthorne Arpt.	150	10.382	6.063	3.869	0.978	0.339	0.112	0.035
Hawthorne Arpt.	160	10.399	6.018	3.784	0.924	0.322	0.111	0.034
Hawthorne Arpt.	170	10.431	5.857	3.684	0.863	0.305	0.110	0.034
Hawthorne Arpt.	180	10.290	5.696	3.579	0.811	0.291	0.110	0.034
Hawthorne Arpt.	190	10.080	5.592	3.509	0.818	0.298	0.110	0.034
Hawthorne Arpt.	200	9.865	5.546	3.463	0.850	0.310	0.110	0.034
Hawthorne Arpt.	210	9.881	5.492	3.462	0.875	0.317	0.110	0.034
Hawthorne Arpt.	220	9.996	5.532	3.492	0.881	0.320	0.110	0.034
Hawthorne Arpt.	230	10.104	5.625	3.537	0.905	0.325	0.111	0.034
Hawthorne Arpt.	240	10.253	5.658	3.556	0.919	0.330	0.112	0.034
Hawthorne Arpt.	250	10.317	5.623	3.529	0.906	0.329	0.113	0.035
Hawthorne Arpt.	260	10.414	5.599	3.462	0.889	0.328	0.114	0.035

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{ton}/\text{yr}}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Hawthorne Arpt.	270	10.229	5.537	3.447	0.898	0.329	0.116	0.036
Hawthorne Arpt.	280	9.829	5.294	3.290	0.861	0.327	0.117	0.036
Hawthorne Arpt.	290	9.225	4.941	3.069	0.800	0.317	0.117	0.036
Hawthorne Arpt.	300	8.654	4.633	2.873	0.766	0.313	0.117	0.036
Hawthorne Arpt.	310	8.207	4.436	2.749	0.741	0.307	0.116	0.036
Hawthorne Arpt.	320	7.859	4.243	2.649	0.716	0.302	0.115	0.035
Hawthorne Arpt.	330	7.481	4.077	2.523	0.691	0.295	0.114	0.035
Hawthorne Arpt.	340	7.093	3.883	2.398	0.654	0.286	0.113	0.035
Hawthorne Arpt.	350	6.802	3.721	2.306	0.622	0.278	0.112	0.035
Hawthorne Arpt.	360	6.651	3.649	2.268	0.608	0.274	0.111	0.034
John Wayne Int'l Arpt.	10	11.525	6.411	4.142	1.132	0.452	0.169	0.051
John Wayne Int'l Arpt.	20	14.281	8.138	5.275	1.439	0.552	0.197	0.060
John Wayne Int'l Arpt.	30	16.806	9.540	6.213	1.722	0.636	0.220	0.067
John Wayne Int'l Arpt.	40	18.225	10.207	6.649	1.810	0.667	0.225	0.068
John Wayne Int'l Arpt.	50	18.231	10.236	6.605	1.811	0.653	0.215	0.065
John Wayne Int'l Arpt.	60	17.285	9.760	6.321	1.722	0.609	0.196	0.059
John Wayne Int'l Arpt.	70	15.501	8.727	5.684	1.566	0.545	0.172	0.052
John Wayne Int'l Arpt.	80	13.046	7.287	4.670	1.275	0.454	0.147	0.044
John Wayne Int'l Arpt.	90	10.337	5.773	3.713	1.026	0.372	0.126	0.038
John Wayne Int'l Arpt.	100	8.135	4.624	2.980	0.830	0.317	0.111	0.034
John Wayne Int'l Arpt.	110	6.707	3.918	2.550	0.717	0.284	0.103	0.031
John Wayne Int'l Arpt.	120	6.000	3.578	2.322	0.659	0.267	0.098	0.030
John Wayne Int'l Arpt.	130	5.746	3.436	2.215	0.624	0.257	0.096	0.030
John Wayne Int'l Arpt.	140	5.747	3.397	2.187	0.614	0.255	0.095	0.030
John Wayne Int'l Arpt.	150	5.826	3.448	2.217	0.622	0.253	0.094	0.029
John Wayne Int'l Arpt.	160	5.984	3.481	2.237	0.617	0.250	0.094	0.029
John Wayne Int'l Arpt.	170	6.380	3.572	2.283	0.601	0.244	0.094	0.029
John Wayne Int'l Arpt.	180	7.017	3.871	2.478	0.625	0.245	0.095	0.029
John Wayne Int'l Arpt.	190	7.824	4.383	2.817	0.722	0.268	0.098	0.030
John Wayne Int'l Arpt.	200	8.397	4.847	3.139	0.830	0.296	0.102	0.032
John Wayne Int'l Arpt.	210	8.555	4.942	3.241	0.891	0.316	0.105	0.033
John Wayne Int'l Arpt.	220	8.254	4.683	3.041	0.828	0.309	0.107	0.033
John Wayne Int'l Arpt.	230	7.711	4.374	2.820	0.787	0.302	0.107	0.033
John Wayne Int'l Arpt.	240	7.328	4.169	2.703	0.767	0.299	0.106	0.033
John Wayne Int'l Arpt.	250	7.183	4.089	2.653	0.751	0.296	0.106	0.033

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{ton}/\text{yr}}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
John Wayne Int'l Arpt.	260	7.266	4.123	2.675	0.769	0.301	0.108	0.033
John Wayne Int'l Arpt.	270	7.454	4.208	2.720	0.783	0.307	0.112	0.034
John Wayne Int'l Arpt.	280	7.790	4.403	2.830	0.811	0.324	0.118	0.037
John Wayne Int'l Arpt.	290	8.107	4.674	3.067	0.895	0.350	0.125	0.039
John Wayne Int'l Arpt.	300	8.201	4.791	3.140	0.912	0.360	0.130	0.041
John Wayne Int'l Arpt.	310	8.015	4.673	3.047	0.887	0.357	0.130	0.041
John Wayne Int'l Arpt.	320	7.684	4.487	2.943	0.852	0.349	0.128	0.040
John Wayne Int'l Arpt.	330	7.406	4.428	2.898	0.840	0.344	0.127	0.039
John Wayne Int'l Arpt.	340	7.320	4.434	2.930	0.833	0.341	0.128	0.039
John Wayne Int'l Arpt.	350	7.809	4.562	3.035	0.854	0.349	0.133	0.041
John Wayne Int'l Arpt.	360	9.135	5.101	3.361	0.914	0.375	0.146	0.044
Lake Elsinore	10	13.087	6.683	4.001	0.955	0.393	0.153	0.047
Lake Elsinore	20	12.293	6.385	3.835	0.976	0.405	0.155	0.048
Lake Elsinore	30	12.494	6.498	3.927	1.020	0.419	0.158	0.049
Lake Elsinore	40	13.106	6.925	4.207	1.073	0.436	0.163	0.050
Lake Elsinore	50	13.688	7.373	4.505	1.155	0.454	0.166	0.051
Lake Elsinore	60	13.972	7.539	4.630	1.189	0.461	0.166	0.051
Lake Elsinore	70	13.694	7.261	4.441	1.148	0.452	0.163	0.050
Lake Elsinore	80	12.965	6.747	4.094	1.064	0.429	0.159	0.049
Lake Elsinore	90	12.377	6.459	3.929	1.024	0.415	0.156	0.048
Lake Elsinore	100	12.618	6.605	4.025	1.040	0.417	0.155	0.048
Lake Elsinore	110	13.761	7.255	4.445	1.126	0.433	0.156	0.048
Lake Elsinore	120	15.717	8.400	5.156	1.274	0.460	0.158	0.049
Lake Elsinore	130	18.015	9.791	6.095	1.498	0.499	0.159	0.049
Lake Elsinore	140	19.793	10.852	6.903	1.695	0.539	0.160	0.049
Lake Elsinore	150	20.504	11.290	7.084	1.723	0.535	0.159	0.049
Lake Elsinore	160	20.017	10.910	6.793	1.588	0.499	0.157	0.049
Lake Elsinore	170	18.792	10.040	6.234	1.399	0.453	0.155	0.048
Lake Elsinore	180	16.982	8.964	5.517	1.201	0.413	0.154	0.048
Lake Elsinore	190	14.902	7.925	4.893	1.121	0.413	0.153	0.047
Lake Elsinore	200	13.094	7.092	4.336	1.071	0.412	0.152	0.047
Lake Elsinore	210	11.834	6.383	3.937	1.015	0.405	0.151	0.047
Lake Elsinore	220	10.958	5.901	3.636	0.957	0.397	0.151	0.047
Lake Elsinore	230	10.319	5.572	3.402	0.914	0.389	0.150	0.047
Lake Elsinore	240	9.932	5.339	3.250	0.880	0.383	0.150	0.047

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{ton}/\text{yr}}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Lake Elsinore	250	9.643	5.204	3.177	0.866	0.381	0.149	0.047
Lake Elsinore	260	9.579	5.160	3.160	0.866	0.380	0.149	0.047
Lake Elsinore	270	9.687	5.197	3.184	0.871	0.379	0.149	0.046
Lake Elsinore	280	10.126	5.336	3.263	0.882	0.382	0.149	0.047
Lake Elsinore	290	11.168	5.743	3.477	0.913	0.388	0.150	0.047
Lake Elsinore	300	13.279	6.739	4.031	1.002	0.403	0.151	0.047
Lake Elsinore	310	16.405	8.527	5.181	1.247	0.444	0.153	0.048
Lake Elsinore	320	19.375	10.494	6.661	1.627	0.519	0.155	0.048
Lake Elsinore	330	20.844	11.671	7.449	1.850	0.553	0.155	0.048
Lake Elsinore	340	20.200	11.088	6.946	1.659	0.508	0.154	0.048
Lake Elsinore	350	17.924	9.390	5.695	1.270	0.430	0.153	0.048
Lake Elsinore	360	15.143	7.633	4.561	1.016	0.392	0.152	0.047
Long Beach Arpt.	10	10.121	5.456	3.439	0.884	0.363	0.138	0.041
Long Beach Arpt.	20	9.056	4.959	3.080	0.815	0.345	0.131	0.039
Long Beach Arpt.	30	7.841	4.267	2.672	0.731	0.317	0.122	0.036
Long Beach Arpt.	40	6.684	3.742	2.368	0.664	0.293	0.113	0.034
Long Beach Arpt.	50	5.843	3.440	2.184	0.624	0.278	0.109	0.033
Long Beach Arpt.	60	5.507	3.289	2.109	0.613	0.275	0.108	0.033
Long Beach Arpt.	70	5.587	3.320	2.156	0.630	0.281	0.110	0.034
Long Beach Arpt.	80	6.197	3.594	2.336	0.687	0.300	0.115	0.035
Long Beach Arpt.	90	7.578	4.187	2.717	0.808	0.340	0.128	0.038
Long Beach Arpt.	100	10.431	5.478	3.422	0.998	0.415	0.154	0.045
Long Beach Arpt.	110	14.532	7.973	5.053	1.359	0.526	0.189	0.058
Long Beach Arpt.	120	18.118	10.657	7.069	1.956	0.671	0.215	0.069
Long Beach Arpt.	130	19.057	11.334	7.581	2.125	0.701	0.212	0.069
Long Beach Arpt.	140	16.868	9.558	6.227	1.649	0.569	0.183	0.057
Long Beach Arpt.	150	13.190	7.209	4.589	1.257	0.447	0.147	0.044
Long Beach Arpt.	160	9.980	5.532	3.566	0.956	0.351	0.122	0.036
Long Beach Arpt.	170	7.954	4.457	2.882	0.745	0.289	0.109	0.033
Long Beach Arpt.	180	6.732	3.845	2.491	0.638	0.261	0.103	0.032
Long Beach Arpt.	190	6.107	3.618	2.348	0.617	0.257	0.100	0.031
Long Beach Arpt.	200	5.936	3.618	2.338	0.632	0.261	0.099	0.031
Long Beach Arpt.	210	6.157	3.703	2.385	0.657	0.266	0.099	0.031
Long Beach Arpt.	220	6.709	3.897	2.493	0.677	0.271	0.100	0.031
Long Beach Arpt.	230	7.484	4.267	2.719	0.731	0.283	0.102	0.031

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{ton}/\text{yr}}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Long Beach Arpt.	240	8.497	4.821	3.078	0.819	0.301	0.104	0.032
Long Beach Arpt.	250	9.445	5.395	3.488	0.931	0.326	0.106	0.033
Long Beach Arpt.	260	10.100	5.724	3.674	0.972	0.334	0.107	0.033
Long Beach Arpt.	270	10.166	5.704	3.638	0.958	0.327	0.108	0.033
Long Beach Arpt.	280	9.877	5.508	3.508	0.933	0.329	0.110	0.034
Long Beach Arpt.	290	9.471	5.349	3.441	0.926	0.334	0.113	0.035
Long Beach Arpt.	300	9.214	5.269	3.411	0.932	0.343	0.117	0.036
Long Beach Arpt.	310	9.129	5.235	3.386	0.930	0.349	0.121	0.037
Long Beach Arpt.	320	9.295	5.250	3.398	0.927	0.358	0.126	0.039
Long Beach Arpt.	330	9.596	5.508	3.545	0.963	0.369	0.131	0.040
Long Beach Arpt.	340	9.947	5.684	3.651	0.988	0.378	0.135	0.042
Long Beach Arpt.	350	10.498	5.645	3.599	0.939	0.370	0.138	0.042
Long Beach Arpt.	360	10.699	5.627	3.514	0.882	0.360	0.140	0.042
Los Angeles Int'l Arpt.	10	4.908	2.920	1.903	0.522	0.223	0.088	0.027
Los Angeles Int'l Arpt.	20	5.095	3.040	1.976	0.557	0.234	0.089	0.028
Los Angeles Int'l Arpt.	30	5.625	3.270	2.146	0.616	0.253	0.094	0.029
Los Angeles Int'l Arpt.	40	6.927	3.848	2.530	0.733	0.299	0.108	0.032
Los Angeles Int'l Arpt.	50	9.539	5.202	3.349	0.964	0.389	0.139	0.040
Los Angeles Int'l Arpt.	60	13.907	7.564	4.816	1.373	0.536	0.188	0.056
Los Angeles Int'l Arpt.	70	18.022	10.315	6.698	1.858	0.694	0.238	0.074
Los Angeles Int'l Arpt.	80	19.132	11.123	7.248	2.023	0.745	0.254	0.080
Los Angeles Int'l Arpt.	90	16.063	8.972	5.667	1.571	0.605	0.219	0.066
Los Angeles Int'l Arpt.	100	11.044	5.695	3.479	1.025	0.437	0.162	0.047
Los Angeles Int'l Arpt.	110	6.917	3.785	2.520	0.772	0.326	0.120	0.035
Los Angeles Int'l Arpt.	120	5.401	3.210	2.143	0.635	0.269	0.100	0.030
Los Angeles Int'l Arpt.	130	5.089	3.065	2.012	0.583	0.248	0.094	0.029
Los Angeles Int'l Arpt.	140	5.091	3.062	2.014	0.584	0.246	0.093	0.029
Los Angeles Int'l Arpt.	150	5.068	3.070	2.000	0.580	0.242	0.092	0.029
Los Angeles Int'l Arpt.	160	4.993	2.990	1.926	0.549	0.235	0.091	0.028
Los Angeles Int'l Arpt.	170	4.974	2.875	1.857	0.526	0.228	0.090	0.028
Los Angeles Int'l Arpt.	180	4.999	2.861	1.858	0.511	0.223	0.090	0.028
Los Angeles Int'l Arpt.	190	5.109	2.976	1.938	0.538	0.230	0.091	0.028
Los Angeles Int'l Arpt.	200	5.400	3.177	2.058	0.580	0.241	0.092	0.028
Los Angeles Int'l Arpt.	210	5.966	3.496	2.273	0.638	0.255	0.095	0.029
Los Angeles Int'l Arpt.	220	6.782	3.953	2.586	0.717	0.275	0.098	0.030

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{ton}/\text{yr}}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Los Angeles Int'l Arpt.	230	7.720	4.521	2.956	0.812	0.297	0.101	0.031
Los Angeles Int'l Arpt.	240	8.870	5.101	3.327	0.902	0.319	0.105	0.032
Los Angeles Int'l Arpt.	250	10.140	5.756	3.745	1.006	0.344	0.109	0.034
Los Angeles Int'l Arpt.	260	11.449	6.505	4.196	1.113	0.368	0.114	0.035
Los Angeles Int'l Arpt.	270	11.919	6.843	4.455	1.196	0.380	0.117	0.037
Los Angeles Int'l Arpt.	280	11.193	6.393	4.119	1.093	0.364	0.116	0.036
Los Angeles Int'l Arpt.	290	9.588	5.418	3.513	0.944	0.333	0.111	0.034
Los Angeles Int'l Arpt.	300	7.980	4.532	2.927	0.795	0.299	0.104	0.032
Los Angeles Int'l Arpt.	310	6.799	3.911	2.523	0.697	0.274	0.099	0.030
Los Angeles Int'l Arpt.	320	6.021	3.506	2.283	0.630	0.256	0.095	0.029
Los Angeles Int'l Arpt.	330	5.482	3.238	2.093	0.591	0.244	0.091	0.028
Los Angeles Int'l Arpt.	340	5.079	3.020	1.945	0.538	0.230	0.089	0.027
Los Angeles Int'l Arpt.	350	4.883	2.876	1.857	0.514	0.221	0.087	0.027
Los Angeles Int'l Arpt.	360	4.833	2.862	1.853	0.502	0.216	0.087	0.027
Mission Viejo	10	16.344	8.682	5.353	1.202	0.425	0.152	0.046
Mission Viejo	20	15.525	8.320	5.036	1.183	0.432	0.153	0.047
Mission Viejo	30	14.877	7.915	4.842	1.181	0.436	0.154	0.047
Mission Viejo	40	14.352	7.635	4.698	1.157	0.435	0.153	0.047
Mission Viejo	50	13.879	7.404	4.502	1.123	0.428	0.152	0.046
Mission Viejo	60	13.520	7.108	4.320	1.085	0.419	0.150	0.046
Mission Viejo	70	13.233	6.880	4.183	1.052	0.412	0.149	0.045
Mission Viejo	80	13.276	6.821	4.103	1.037	0.408	0.148	0.045
Mission Viejo	90	13.407	6.912	4.176	1.055	0.407	0.148	0.045
Mission Viejo	100	13.581	7.055	4.274	1.080	0.413	0.149	0.045
Mission Viejo	110	13.499	7.093	4.349	1.102	0.418	0.149	0.045
Mission Viejo	120	13.018	6.905	4.247	1.092	0.417	0.148	0.045
Mission Viejo	130	12.057	6.402	3.948	1.036	0.406	0.146	0.045
Mission Viejo	140	10.756	5.660	3.469	0.915	0.382	0.145	0.044
Mission Viejo	150	9.319	4.912	2.979	0.806	0.360	0.143	0.044
Mission Viejo	160	8.192	4.377	2.666	0.743	0.348	0.141	0.044
Mission Viejo	170	7.556	4.102	2.518	0.714	0.341	0.141	0.044
Mission Viejo	180	7.482	4.074	2.507	0.707	0.339	0.140	0.043
Mission Viejo	190	8.023	4.327	2.645	0.729	0.342	0.140	0.043
Mission Viejo	200	9.348	4.977	3.024	0.792	0.351	0.141	0.044
Mission Viejo	210	11.391	6.120	3.744	0.952	0.377	0.141	0.044

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{ton}/\text{yr}}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Mission Viejo	220	13.828	7.585	4.767	1.197	0.423	0.142	0.044
Mission Viejo	230	16.038	8.947	5.666	1.412	0.460	0.142	0.044
Mission Viejo	240	17.703	9.810	6.175	1.514	0.477	0.142	0.044
Mission Viejo	250	18.448	10.159	6.385	1.543	0.482	0.142	0.044
Mission Viejo	260	18.688	10.195	6.345	1.527	0.475	0.142	0.044
Mission Viejo	270	18.312	9.997	6.229	1.507	0.466	0.142	0.044
Mission Viejo	280	17.601	9.602	5.969	1.441	0.460	0.142	0.044
Mission Viejo	290	16.665	9.158	5.726	1.382	0.452	0.142	0.044
Mission Viejo	300	15.929	8.839	5.514	1.342	0.447	0.143	0.044
Mission Viejo	310	15.441	8.625	5.403	1.331	0.447	0.143	0.044
Mission Viejo	320	15.301	8.485	5.332	1.295	0.443	0.144	0.044
Mission Viejo	330	15.420	8.563	5.301	1.279	0.437	0.145	0.045
Mission Viejo	340	15.770	8.721	5.397	1.279	0.436	0.146	0.045
Mission Viejo	350	16.476	8.880	5.510	1.249	0.422	0.148	0.045
Mission Viejo	360	16.747	8.928	5.507	1.191	0.407	0.150	0.046
Ontario Arpt.	10	5.661	3.155	1.999	0.546	0.236	0.092	0.028
Ontario Arpt.	20	6.348	3.566	2.275	0.636	0.268	0.101	0.031
Ontario Arpt.	30	7.466	4.113	2.647	0.763	0.316	0.116	0.035
Ontario Arpt.	40	9.456	5.031	3.236	0.949	0.400	0.145	0.042
Ontario Arpt.	50	12.886	6.924	4.381	1.288	0.546	0.200	0.058
Ontario Arpt.	60	17.544	9.881	6.378	1.854	0.747	0.270	0.083
Ontario Arpt.	70	20.749	12.202	8.120	2.389	0.908	0.315	0.101
Ontario Arpt.	80	19.996	11.599	7.581	2.216	0.850	0.297	0.094
Ontario Arpt.	90	15.632	8.605	5.452	1.596	0.635	0.231	0.069
Ontario Arpt.	100	10.805	5.756	3.667	1.112	0.457	0.164	0.048
Ontario Arpt.	110	7.546	4.256	2.831	0.852	0.345	0.124	0.037
Ontario Arpt.	120	6.142	3.610	2.381	0.696	0.287	0.105	0.032
Ontario Arpt.	130	5.647	3.375	2.211	0.645	0.267	0.098	0.030
Ontario Arpt.	140	5.575	3.359	2.208	0.631	0.260	0.096	0.030
Ontario Arpt.	150	5.634	3.451	2.265	0.650	0.262	0.096	0.030
Ontario Arpt.	160	5.783	3.503	2.292	0.644	0.259	0.097	0.030
Ontario Arpt.	170	6.190	3.581	2.346	0.641	0.257	0.098	0.031
Ontario Arpt.	180	6.807	3.850	2.523	0.661	0.262	0.102	0.032
Ontario Arpt.	190	7.696	4.344	2.831	0.753	0.289	0.108	0.033
Ontario Arpt.	200	8.712	5.046	3.303	0.900	0.330	0.115	0.036

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{ton}/\text{yr}}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Ontario Arpt.	210	9.731	5.696	3.760	1.050	0.368	0.122	0.038
Ontario Arpt.	220	10.296	6.001	3.992	1.102	0.383	0.124	0.039
Ontario Arpt.	230	10.130	5.898	3.880	1.081	0.374	0.119	0.037
Ontario Arpt.	240	9.553	5.475	3.573	0.981	0.343	0.110	0.034
Ontario Arpt.	250	8.866	5.031	3.275	0.896	0.315	0.101	0.031
Ontario Arpt.	260	8.244	4.676	3.023	0.829	0.291	0.094	0.029
Ontario Arpt.	270	7.533	4.274	2.758	0.752	0.264	0.088	0.027
Ontario Arpt.	280	6.770	3.837	2.462	0.667	0.246	0.085	0.026
Ontario Arpt.	290	6.075	3.468	2.231	0.615	0.235	0.083	0.026
Ontario Arpt.	300	5.601	3.216	2.061	0.571	0.226	0.081	0.025
Ontario Arpt.	310	5.313	3.054	1.953	0.543	0.220	0.081	0.025
Ontario Arpt.	320	5.156	2.958	1.888	0.525	0.217	0.081	0.025
Ontario Arpt.	330	5.038	2.911	1.850	0.519	0.216	0.081	0.025
Ontario Arpt.	340	4.954	2.861	1.820	0.505	0.213	0.082	0.025
Ontario Arpt.	350	4.995	2.847	1.809	0.495	0.212	0.083	0.026
Ontario Arpt.	360	5.211	2.919	1.853	0.499	0.217	0.087	0.027
Palm Springs Arpt.	10	6.254	3.492	2.215	0.560	0.217	0.081	0.025
Palm Springs Arpt.	20	6.171	3.519	2.220	0.576	0.222	0.081	0.025
Palm Springs Arpt.	30	6.249	3.573	2.280	0.607	0.229	0.081	0.025
Palm Springs Arpt.	40	6.440	3.692	2.377	0.635	0.238	0.083	0.025
Palm Springs Arpt.	50	6.736	3.891	2.501	0.671	0.249	0.085	0.026
Palm Springs Arpt.	60	7.317	4.213	2.715	0.731	0.267	0.090	0.027
Palm Springs Arpt.	70	8.203	4.712	3.068	0.832	0.296	0.097	0.030
Palm Springs Arpt.	80	9.355	5.344	3.470	0.943	0.328	0.106	0.033
Palm Springs Arpt.	90	10.382	5.916	3.849	1.058	0.361	0.117	0.036
Palm Springs Arpt.	100	11.300	6.391	4.155	1.159	0.407	0.133	0.040
Palm Springs Arpt.	110	12.374	6.957	4.595	1.313	0.473	0.157	0.047
Palm Springs Arpt.	120	14.132	7.960	5.187	1.494	0.561	0.191	0.058
Palm Springs Arpt.	130	15.928	9.199	6.030	1.718	0.650	0.226	0.071
Palm Springs Arpt.	140	16.177	9.541	6.378	1.822	0.689	0.240	0.077
Palm Springs Arpt.	150	14.037	8.198	5.370	1.570	0.609	0.217	0.069
Palm Springs Arpt.	160	10.440	5.726	3.643	1.058	0.447	0.171	0.052
Palm Springs Arpt.	170	7.179	3.779	2.404	0.732	0.325	0.126	0.037
Palm Springs Arpt.	180	5.289	2.912	1.907	0.557	0.249	0.098	0.029
Palm Springs Arpt.	190	4.555	2.622	1.706	0.485	0.217	0.085	0.026

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{ton}/\text{yr}}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Palm Springs Arpt.	200	4.315	2.512	1.598	0.451	0.204	0.081	0.025
Palm Springs Arpt.	210	4.277	2.461	1.553	0.442	0.200	0.079	0.024
Palm Springs Arpt.	220	4.306	2.438	1.533	0.438	0.198	0.078	0.024
Palm Springs Arpt.	230	4.409	2.457	1.529	0.435	0.198	0.078	0.024
Palm Springs Arpt.	240	4.676	2.553	1.590	0.452	0.203	0.079	0.024
Palm Springs Arpt.	250	5.120	2.768	1.734	0.490	0.215	0.083	0.025
Palm Springs Arpt.	260	5.990	3.123	1.925	0.538	0.231	0.088	0.026
Palm Springs Arpt.	270	7.011	3.656	2.225	0.602	0.251	0.095	0.029
Palm Springs Arpt.	280	7.893	4.169	2.552	0.684	0.276	0.101	0.031
Palm Springs Arpt.	290	8.306	4.418	2.742	0.725	0.287	0.104	0.031
Palm Springs Arpt.	300	8.268	4.383	2.699	0.713	0.284	0.102	0.030
Palm Springs Arpt.	310	7.914	4.212	2.607	0.693	0.273	0.097	0.029
Palm Springs Arpt.	320	7.517	4.021	2.529	0.671	0.263	0.093	0.028
Palm Springs Arpt.	330	7.129	3.921	2.461	0.649	0.250	0.089	0.027
Palm Springs Arpt.	340	6.805	3.797	2.390	0.626	0.240	0.086	0.026
Palm Springs Arpt.	350	6.619	3.646	2.300	0.583	0.224	0.084	0.026
Palm Springs Arpt.	360	6.443	3.525	2.222	0.546	0.213	0.082	0.025
Perris	10	18.023	9.480	5.810	1.266	0.432	0.154	0.048
Perris	20	16.116	8.682	5.305	1.264	0.443	0.152	0.047
Perris	30	14.541	7.842	4.855	1.206	0.434	0.151	0.047
Perris	40	13.078	7.038	4.351	1.090	0.415	0.149	0.046
Perris	50	11.763	6.359	3.879	0.996	0.397	0.147	0.046
Perris	60	10.737	5.818	3.555	0.935	0.386	0.146	0.046
Perris	70	10.065	5.446	3.338	0.896	0.380	0.145	0.045
Perris	80	9.767	5.271	3.223	0.863	0.371	0.145	0.045
Perris	90	9.817	5.298	3.254	0.877	0.373	0.145	0.045
Perris	100	10.304	5.534	3.404	0.914	0.384	0.146	0.046
Perris	110	11.363	6.046	3.722	0.978	0.400	0.150	0.046
Perris	120	13.177	6.962	4.291	1.110	0.435	0.157	0.048
Perris	130	15.772	8.344	5.147	1.315	0.488	0.169	0.052
Perris	140	18.317	9.850	6.226	1.564	0.553	0.183	0.056
Perris	150	19.734	10.893	6.896	1.754	0.592	0.191	0.059
Perris	160	19.512	10.643	6.633	1.631	0.561	0.189	0.058
Perris	170	17.839	9.353	5.754	1.374	0.495	0.180	0.056
Perris	180	15.286	7.858	4.826	1.141	0.440	0.169	0.052

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{ton}/\text{yr}}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Perris	190	12.981	6.751	4.170	1.025	0.418	0.161	0.050
Perris	200	11.455	6.143	3.766	0.977	0.406	0.156	0.048
Perris	210	10.769	5.789	3.570	0.952	0.399	0.153	0.047
Perris	220	10.462	5.629	3.465	0.929	0.394	0.151	0.047
Perris	230	10.286	5.537	3.388	0.914	0.390	0.150	0.047
Perris	240	10.240	5.450	3.324	0.897	0.385	0.149	0.046
Perris	250	10.193	5.414	3.295	0.886	0.380	0.147	0.046
Perris	260	10.304	5.449	3.320	0.892	0.379	0.146	0.045
Perris	270	10.540	5.578	3.401	0.907	0.377	0.145	0.045
Perris	280	10.991	5.789	3.520	0.928	0.381	0.144	0.045
Perris	290	11.682	6.142	3.731	0.962	0.387	0.145	0.045
Perris	300	12.851	6.762	4.097	1.030	0.399	0.145	0.045
Perris	310	14.635	7.724	4.716	1.160	0.423	0.147	0.046
Perris	320	16.797	8.941	5.570	1.351	0.461	0.149	0.046
Perris	330	18.971	10.289	6.394	1.538	0.493	0.152	0.047
Perris	340	20.523	11.222	6.954	1.609	0.498	0.155	0.048
Perris	350	20.930	11.256	6.993	1.539	0.473	0.156	0.049
Perris	360	19.950	10.481	6.392	1.327	0.428	0.155	0.048
Pico Rivera	10	16.929	8.880	5.436	1.181	0.395	0.137	0.041
Pico Rivera	20	17.595	9.295	5.643	1.273	0.422	0.139	0.042
Pico Rivera	30	18.144	9.434	5.766	1.330	0.436	0.141	0.042
Pico Rivera	40	18.117	9.517	5.883	1.370	0.449	0.141	0.042
Pico Rivera	50	17.029	9.184	5.700	1.391	0.454	0.140	0.042
Pico Rivera	60	15.126	8.110	5.002	1.216	0.418	0.136	0.041
Pico Rivera	70	12.677	6.570	3.975	0.964	0.366	0.131	0.040
Pico Rivera	80	10.282	5.219	3.120	0.798	0.332	0.126	0.038
Pico Rivera	90	8.471	4.422	2.691	0.720	0.314	0.123	0.038
Pico Rivera	100	7.563	4.065	2.495	0.684	0.306	0.121	0.037
Pico Rivera	110	7.226	3.932	2.428	0.673	0.304	0.121	0.037
Pico Rivera	120	7.142	3.890	2.391	0.667	0.302	0.120	0.037
Pico Rivera	130	7.072	3.860	2.369	0.660	0.301	0.120	0.037
Pico Rivera	140	6.953	3.820	2.351	0.657	0.300	0.120	0.037
Pico Rivera	150	6.756	3.745	2.313	0.656	0.300	0.120	0.037
Pico Rivera	160	6.548	3.616	2.239	0.634	0.295	0.120	0.037
Pico Rivera	170	6.519	3.506	2.164	0.611	0.291	0.120	0.037

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{ton}/\text{yr}}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Pico Rivera	180	7.006	3.634	2.209	0.608	0.290	0.120	0.037
Pico Rivera	190	8.728	4.335	2.558	0.649	0.295	0.120	0.037
Pico Rivera	200	11.448	5.848	3.480	0.819	0.320	0.121	0.037
Pico Rivera	210	14.162	7.685	4.779	1.179	0.383	0.122	0.038
Pico Rivera	220	15.947	8.883	5.714	1.422	0.433	0.123	0.038
Pico Rivera	230	16.099	8.862	5.585	1.369	0.422	0.123	0.038
Pico Rivera	240	14.811	7.846	4.824	1.140	0.380	0.123	0.038
Pico Rivera	250	12.878	6.700	4.073	0.965	0.351	0.122	0.038
Pico Rivera	260	11.368	5.960	3.613	0.891	0.338	0.122	0.037
Pico Rivera	270	10.409	5.574	3.421	0.867	0.333	0.121	0.037
Pico Rivera	280	9.948	5.388	3.302	0.839	0.328	0.121	0.037
Pico Rivera	290	9.702	5.331	3.273	0.829	0.328	0.121	0.037
Pico Rivera	300	9.735	5.388	3.295	0.839	0.331	0.121	0.037
Pico Rivera	310	10.082	5.550	3.389	0.856	0.335	0.122	0.038
Pico Rivera	320	10.670	5.833	3.590	0.887	0.342	0.123	0.038
Pico Rivera	330	11.457	6.305	3.864	0.949	0.353	0.125	0.038
Pico Rivera	340	12.499	6.854	4.190	0.993	0.361	0.127	0.039
Pico Rivera	350	14.128	7.450	4.570	1.018	0.361	0.130	0.039
Pico Rivera	360	15.780	8.178	4.987	1.049	0.361	0.133	0.040
Redlands	10	7.976	4.634	2.840	0.782	0.363	0.149	0.046
Redlands	20	8.472	4.687	2.849	0.790	0.366	0.149	0.046
Redlands	30	8.843	4.768	2.910	0.809	0.370	0.149	0.046
Redlands	40	9.152	4.914	3.016	0.834	0.376	0.150	0.047
Redlands	50	9.820	5.187	3.181	0.871	0.386	0.151	0.047
Redlands	60	11.354	5.762	3.490	0.935	0.403	0.156	0.048
Redlands	70	14.066	6.998	4.178	1.063	0.435	0.163	0.050
Redlands	80	18.074	9.144	5.454	1.324	0.487	0.171	0.052
Redlands	90	21.113	11.126	6.852	1.707	0.554	0.176	0.054
Redlands	100	21.850	11.587	7.136	1.758	0.569	0.176	0.054
Redlands	110	20.042	10.349	6.345	1.544	0.523	0.170	0.052
Redlands	120	17.069	8.689	5.252	1.291	0.473	0.163	0.050
Redlands	130	14.290	7.287	4.428	1.126	0.437	0.157	0.048
Redlands	140	12.179	6.236	3.799	0.988	0.406	0.153	0.047
Redlands	150	10.623	5.498	3.325	0.889	0.385	0.151	0.047
Redlands	160	9.590	5.010	3.029	0.824	0.372	0.149	0.046

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{ton}/\text{yr}}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Redlands	170	8.979	4.715	2.852	0.783	0.363	0.149	0.046
Redlands	180	8.671	4.554	2.761	0.763	0.359	0.148	0.046
Redlands	190	8.438	4.512	2.738	0.765	0.361	0.148	0.046
Redlands	200	8.006	4.528	2.761	0.778	0.365	0.149	0.046
Redlands	210	7.755	4.601	2.839	0.800	0.370	0.150	0.047
Redlands	220	7.971	4.740	2.968	0.831	0.377	0.151	0.047
Redlands	230	8.689	4.960	3.114	0.858	0.382	0.151	0.047
Redlands	240	10.588	5.523	3.363	0.900	0.388	0.151	0.047
Redlands	250	14.273	7.128	4.099	0.974	0.399	0.151	0.047
Redlands	260	21.578	10.549	6.059	1.201	0.421	0.150	0.047
Redlands	270	30.712	16.466	9.941	2.068	0.535	0.150	0.047
Redlands	280	37.628	21.938	14.366	3.603	0.847	0.152	0.047
Redlands	290	38.370	22.653	15.102	3.889	0.916	0.152	0.046
Redlands	300	32.611	18.028	11.205	2.437	0.615	0.150	0.046
Redlands	310	23.669	11.888	6.922	1.364	0.440	0.149	0.046
Redlands	320	16.063	7.825	4.516	1.010	0.398	0.149	0.046
Redlands	330	11.431	5.885	3.529	0.911	0.385	0.149	0.046
Redlands	340	9.169	5.099	3.161	0.849	0.374	0.149	0.046
Redlands	350	8.239	4.790	2.985	0.806	0.366	0.149	0.046
Redlands	360	7.933	4.665	2.878	0.779	0.361	0.149	0.046
Riverside Arpt.	10	6.357	3.639	2.288	0.613	0.264	0.105	0.033
Riverside Arpt.	20	6.310	3.706	2.336	0.638	0.272	0.105	0.033
Riverside Arpt.	30	6.442	3.819	2.427	0.668	0.280	0.107	0.033
Riverside Arpt.	40	6.745	3.984	2.559	0.705	0.293	0.109	0.034
Riverside Arpt.	50	7.413	4.314	2.781	0.760	0.311	0.115	0.035
Riverside Arpt.	60	9.199	5.012	3.206	0.887	0.359	0.129	0.038
Riverside Arpt.	70	13.463	6.819	4.219	1.126	0.446	0.159	0.046
Riverside Arpt.	80	20.625	11.038	6.721	1.654	0.589	0.200	0.061
Riverside Arpt.	90	25.743	14.771	9.612	2.578	0.786	0.229	0.073
Riverside Arpt.	100	25.145	14.315	9.200	2.349	0.739	0.222	0.070
Riverside Arpt.	110	19.505	10.310	6.423	1.630	0.565	0.185	0.055
Riverside Arpt.	120	13.201	6.887	4.304	1.147	0.428	0.145	0.042
Riverside Arpt.	130	9.196	5.061	3.246	0.883	0.342	0.120	0.035
Riverside Arpt.	140	7.145	4.113	2.648	0.724	0.295	0.109	0.033
Riverside Arpt.	150	6.054	3.619	2.314	0.644	0.276	0.106	0.033

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{ton}/\text{yr}}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Riverside Arpt.	160	5.536	3.373	2.156	0.606	0.267	0.106	0.033
Riverside Arpt.	170	5.448	3.289	2.100	0.588	0.265	0.107	0.033
Riverside Arpt.	180	5.739	3.364	2.153	0.597	0.271	0.110	0.034
Riverside Arpt.	190	6.370	3.648	2.325	0.648	0.289	0.115	0.035
Riverside Arpt.	200	7.372	4.109	2.612	0.736	0.319	0.124	0.038
Riverside Arpt.	210	8.992	4.917	3.106	0.874	0.362	0.136	0.041
Riverside Arpt.	220	11.154	6.197	3.979	1.088	0.421	0.151	0.047
Riverside Arpt.	230	13.274	7.585	4.930	1.355	0.487	0.163	0.051
Riverside Arpt.	240	14.706	8.420	5.477	1.485	0.513	0.166	0.053
Riverside Arpt.	250	14.894	8.404	5.440	1.467	0.502	0.159	0.050
Riverside Arpt.	260	14.126	7.830	4.991	1.330	0.454	0.145	0.045
Riverside Arpt.	270	12.798	7.053	4.497	1.194	0.403	0.131	0.040
Riverside Arpt.	280	11.479	6.350	4.050	1.069	0.370	0.121	0.037
Riverside Arpt.	290	10.340	5.802	3.740	0.989	0.346	0.114	0.035
Riverside Arpt.	300	9.542	5.415	3.477	0.921	0.331	0.111	0.034
Riverside Arpt.	310	8.966	5.105	3.269	0.865	0.317	0.109	0.034
Riverside Arpt.	320	8.471	4.818	3.091	0.818	0.308	0.108	0.033
Riverside Arpt.	330	7.946	4.528	2.884	0.780	0.299	0.106	0.033
Riverside Arpt.	340	7.424	4.186	2.644	0.704	0.282	0.105	0.033
Riverside Arpt.	350	6.983	3.859	2.426	0.640	0.268	0.105	0.033
Riverside Arpt.	360	6.615	3.672	2.299	0.603	0.260	0.105	0.032
Santa Monica Arpt.	10	9.279	5.039	3.170	0.803	0.326	0.124	0.038
Santa Monica Arpt.	20	10.948	5.830	3.622	0.927	0.365	0.133	0.040
Santa Monica Arpt.	30	13.763	7.058	4.334	1.106	0.417	0.147	0.043
Santa Monica Arpt.	40	16.856	8.913	5.505	1.349	0.486	0.165	0.049
Santa Monica Arpt.	50	18.698	10.346	6.544	1.662	0.563	0.178	0.053
Santa Monica Arpt.	60	18.443	10.217	6.470	1.639	0.556	0.177	0.053
Santa Monica Arpt.	70	16.029	8.563	5.282	1.312	0.474	0.160	0.047
Santa Monica Arpt.	80	12.608	6.506	3.989	1.047	0.399	0.139	0.041
Santa Monica Arpt.	90	9.678	5.214	3.277	0.877	0.344	0.125	0.038
Santa Monica Arpt.	100	8.248	4.610	2.923	0.786	0.318	0.119	0.036
Santa Monica Arpt.	110	7.741	4.435	2.828	0.765	0.312	0.116	0.036
Santa Monica Arpt.	120	7.727	4.477	2.842	0.769	0.311	0.116	0.036
Santa Monica Arpt.	130	7.864	4.586	2.901	0.785	0.314	0.116	0.036
Santa Monica Arpt.	140	8.083	4.689	2.987	0.797	0.318	0.117	0.036

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{ton}/\text{yr}}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Santa Monica Arpt.	150	8.335	4.838	3.056	0.813	0.322	0.118	0.037
Santa Monica Arpt.	160	8.677	5.009	3.160	0.819	0.322	0.120	0.037
Santa Monica Arpt.	170	9.256	5.228	3.338	0.835	0.321	0.121	0.038
Santa Monica Arpt.	180	9.909	5.461	3.470	0.829	0.315	0.122	0.038
Santa Monica Arpt.	190	10.848	5.850	3.679	0.878	0.327	0.122	0.038
Santa Monica Arpt.	200	12.075	6.672	4.183	1.015	0.354	0.122	0.038
Santa Monica Arpt.	210	13.681	7.639	4.869	1.220	0.393	0.123	0.038
Santa Monica Arpt.	220	14.854	8.372	5.416	1.347	0.419	0.123	0.038
Santa Monica Arpt.	230	14.984	8.444	5.420	1.367	0.426	0.124	0.038
Santa Monica Arpt.	240	14.156	7.850	4.977	1.238	0.401	0.123	0.038
Santa Monica Arpt.	250	12.754	6.925	4.346	1.085	0.374	0.122	0.038
Santa Monica Arpt.	260	11.407	6.134	3.811	0.967	0.351	0.121	0.037
Santa Monica Arpt.	270	10.262	5.602	3.497	0.909	0.337	0.120	0.037
Santa Monica Arpt.	280	9.397	5.202	3.273	0.863	0.331	0.119	0.037
Santa Monica Arpt.	290	8.629	4.843	3.063	0.818	0.323	0.119	0.037
Santa Monica Arpt.	300	8.066	4.530	2.834	0.763	0.314	0.118	0.036
Santa Monica Arpt.	310	7.653	4.314	2.693	0.731	0.308	0.118	0.036
Santa Monica Arpt.	320	7.402	4.184	2.630	0.721	0.307	0.117	0.036
Santa Monica Arpt.	330	7.233	4.141	2.592	0.709	0.303	0.117	0.036
Santa Monica Arpt.	340	7.270	4.158	2.594	0.698	0.301	0.117	0.036
Santa Monica Arpt.	350	7.614	4.295	2.707	0.708	0.300	0.118	0.036
Santa Monica Arpt.	360	8.227	4.559	2.889	0.731	0.304	0.120	0.037
Upland	10	7.802	4.149	2.507	0.687	0.323	0.132	0.041
Upland	20	8.204	4.377	2.650	0.718	0.332	0.134	0.041
Upland	30	9.156	4.805	2.921	0.778	0.347	0.137	0.042
Upland	40	10.985	5.637	3.430	0.879	0.372	0.142	0.043
Upland	50	13.809	7.049	4.257	1.054	0.413	0.149	0.045
Upland	60	17.733	9.053	5.449	1.301	0.464	0.157	0.047
Upland	70	21.393	11.297	6.925	1.611	0.520	0.162	0.049
Upland	80	23.496	12.789	7.924	1.888	0.566	0.160	0.048
Upland	90	22.593	12.344	7.701	1.889	0.550	0.153	0.046
Upland	100	19.098	10.221	6.250	1.485	0.469	0.144	0.043
Upland	110	14.548	7.879	4.882	1.174	0.409	0.137	0.041
Upland	120	11.568	6.503	4.051	1.008	0.376	0.132	0.040
Upland	130	10.809	6.097	3.792	0.950	0.362	0.130	0.040

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{ton}/\text{yr}}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Upland	140	12.523	6.761	4.165	0.982	0.366	0.129	0.040
Upland	150	16.613	9.007	5.450	1.194	0.392	0.129	0.040
Upland	160	21.627	12.273	7.657	1.665	0.460	0.129	0.040
Upland	170	24.921	14.374	9.376	2.076	0.503	0.129	0.040
Upland	180	24.141	13.366	8.431	1.672	0.414	0.129	0.040
Upland	190	19.586	10.080	6.220	1.215	0.378	0.129	0.040
Upland	200	14.389	7.660	4.586	1.044	0.370	0.129	0.040
Upland	210	11.447	6.079	3.736	0.926	0.355	0.129	0.040
Upland	220	9.718	5.267	3.241	0.833	0.342	0.129	0.040
Upland	230	8.818	4.806	2.929	0.783	0.335	0.129	0.040
Upland	240	8.379	4.496	2.731	0.743	0.329	0.129	0.040
Upland	250	8.153	4.276	2.594	0.719	0.325	0.129	0.040
Upland	260	8.073	4.135	2.494	0.698	0.322	0.129	0.040
Upland	270	7.991	4.043	2.427	0.683	0.318	0.129	0.040
Upland	280	7.945	3.995	2.396	0.675	0.318	0.129	0.040
Upland	290	7.956	3.994	2.399	0.676	0.318	0.130	0.040
Upland	300	7.980	4.007	2.407	0.681	0.320	0.130	0.040
Upland	310	7.984	4.007	2.405	0.679	0.320	0.130	0.040
Upland	320	7.951	3.982	2.390	0.675	0.319	0.130	0.040
Upland	330	7.875	3.966	2.372	0.670	0.318	0.130	0.040
Upland	340	7.777	3.961	2.365	0.666	0.317	0.130	0.040
Upland	350	7.699	3.978	2.384	0.665	0.317	0.131	0.040
Upland	360	7.676	4.031	2.426	0.669	0.318	0.131	0.041
USC/Downtown L.A.	10	8.044	4.490	2.745	0.716	0.319	0.128	0.039
USC/Downtown L.A.	20	8.748	4.883	2.979	0.768	0.329	0.128	0.040
USC/Downtown L.A.	30	10.150	5.600	3.449	0.875	0.349	0.130	0.040
USC/Downtown L.A.	40	12.335	6.696	4.172	1.030	0.382	0.132	0.040
USC/Downtown L.A.	50	15.352	8.188	5.073	1.230	0.422	0.137	0.041
USC/Downtown L.A.	60	19.864	10.224	6.209	1.437	0.465	0.143	0.043
USC/Downtown L.A.	70	24.785	13.090	8.009	1.778	0.524	0.149	0.045
USC/Downtown L.A.	80	28.548	15.697	9.827	2.300	0.623	0.153	0.046
USC/Downtown L.A.	90	28.601	15.843	10.033	2.435	0.635	0.151	0.045
USC/Downtown L.A.	100	24.758	13.189	8.038	1.839	0.525	0.144	0.043
USC/Downtown L.A.	110	18.513	9.666	5.925	1.372	0.442	0.137	0.041
USC/Downtown L.A.	120	13.661	7.415	4.579	1.119	0.394	0.132	0.040

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{ton}/\text{yr}}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
USC/Downtown L.A.	130	10.902	6.259	3.948	1.000	0.371	0.129	0.040
USC/Downtown L.A.	140	9.581	5.668	3.614	0.939	0.361	0.128	0.040
USC/Downtown L.A.	150	9.017	5.315	3.339	0.874	0.347	0.128	0.040
USC/Downtown L.A.	160	8.915	5.111	3.167	0.814	0.335	0.128	0.039
USC/Downtown L.A.	170	9.400	5.156	3.193	0.798	0.328	0.128	0.039
USC/Downtown L.A.	180	10.331	5.508	3.413	0.820	0.326	0.127	0.039
USC/Downtown L.A.	190	11.199	6.069	3.775	0.912	0.343	0.127	0.039
USC/Downtown L.A.	200	11.548	6.385	3.991	1.000	0.364	0.128	0.039
USC/Downtown L.A.	210	11.419	6.236	3.920	1.009	0.368	0.128	0.039
USC/Downtown L.A.	220	10.860	5.799	3.625	0.926	0.355	0.127	0.039
USC/Downtown L.A.	230	10.167	5.390	3.322	0.868	0.347	0.128	0.039
USC/Downtown L.A.	240	9.851	5.197	3.201	0.844	0.343	0.128	0.039
USC/Downtown L.A.	250	10.020	5.275	3.249	0.858	0.347	0.129	0.040
USC/Downtown L.A.	260	10.764	5.631	3.439	0.893	0.353	0.129	0.040
USC/Downtown L.A.	270	11.494	6.104	3.755	0.970	0.363	0.130	0.040
USC/Downtown L.A.	280	11.879	6.341	3.929	1.026	0.377	0.131	0.040
USC/Downtown L.A.	290	11.678	6.188	3.844	0.994	0.372	0.130	0.040
USC/Downtown L.A.	300	11.096	5.803	3.550	0.920	0.359	0.130	0.040
USC/Downtown L.A.	310	10.406	5.435	3.325	0.870	0.351	0.130	0.040
USC/Downtown L.A.	320	9.778	5.126	3.162	0.837	0.346	0.129	0.040
USC/Downtown L.A.	330	9.187	4.887	2.993	0.801	0.338	0.129	0.040
USC/Downtown L.A.	340	8.666	4.666	2.851	0.759	0.329	0.129	0.040
USC/Downtown L.A.	350	8.226	4.483	2.747	0.729	0.322	0.128	0.040
USC/Downtown L.A.	360	7.931	4.394	2.689	0.704	0.316	0.128	0.039
Van Nuys Arpt.	10	7.308	4.096	2.608	0.693	0.294	0.114	0.035
Van Nuys Arpt.	20	6.654	3.889	2.465	0.668	0.281	0.108	0.033
Van Nuys Arpt.	30	6.514	3.829	2.442	0.669	0.277	0.104	0.032
Van Nuys Arpt.	40	6.590	3.870	2.482	0.681	0.278	0.103	0.032
Van Nuys Arpt.	50	6.857	3.995	2.552	0.700	0.282	0.104	0.032
Van Nuys Arpt.	60	7.522	4.280	2.725	0.739	0.292	0.106	0.032
Van Nuys Arpt.	70	8.714	4.912	3.132	0.834	0.313	0.110	0.034
Van Nuys Arpt.	80	10.486	5.904	3.761	0.989	0.347	0.114	0.035
Van Nuys Arpt.	90	12.121	6.862	4.405	1.157	0.375	0.118	0.037
Van Nuys Arpt.	100	13.086	7.385	4.725	1.224	0.393	0.120	0.037
Van Nuys Arpt.	110	13.199	7.453	4.815	1.249	0.399	0.120	0.037

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{ton}/\text{yr}}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Van Nuys Arpt.	120	12.821	7.276	4.695	1.214	0.392	0.118	0.036
Van Nuys Arpt.	130	12.232	6.950	4.494	1.168	0.381	0.116	0.036
Van Nuys Arpt.	140	11.568	6.539	4.260	1.108	0.373	0.116	0.035
Van Nuys Arpt.	150	10.900	6.213	4.011	1.057	0.366	0.120	0.037
Van Nuys Arpt.	160	10.318	5.883	3.783	0.990	0.361	0.126	0.039
Van Nuys Arpt.	170	9.793	5.508	3.528	0.916	0.352	0.132	0.041
Van Nuys Arpt.	180	8.749	4.881	3.106	0.801	0.330	0.131	0.041
Van Nuys Arpt.	190	7.325	4.055	2.590	0.709	0.312	0.124	0.038
Van Nuys Arpt.	200	6.095	3.550	2.273	0.649	0.291	0.115	0.035
Van Nuys Arpt.	210	5.585	3.291	2.105	0.608	0.273	0.108	0.033
Van Nuys Arpt.	220	5.391	3.173	2.026	0.585	0.263	0.104	0.032
Van Nuys Arpt.	230	5.358	3.158	2.017	0.586	0.261	0.102	0.032
Van Nuys Arpt.	240	5.562	3.221	2.067	0.600	0.264	0.103	0.032
Van Nuys Arpt.	250	6.141	3.468	2.226	0.637	0.276	0.106	0.032
Van Nuys Arpt.	260	7.517	4.139	2.628	0.740	0.306	0.114	0.035
Van Nuys Arpt.	270	9.582	5.285	3.371	0.947	0.361	0.128	0.039
Van Nuys Arpt.	280	11.940	6.646	4.251	1.172	0.426	0.146	0.045
Van Nuys Arpt.	290	13.781	7.748	5.036	1.390	0.492	0.162	0.051
Van Nuys Arpt.	300	14.699	8.257	5.318	1.452	0.519	0.171	0.053
Van Nuys Arpt.	310	14.663	8.126	5.188	1.399	0.512	0.173	0.053
Van Nuys Arpt.	320	13.864	7.557	4.837	1.295	0.489	0.167	0.050
Van Nuys Arpt.	330	12.590	6.864	4.320	1.158	0.447	0.158	0.047
Van Nuys Arpt.	340	11.154	6.065	3.794	1.002	0.399	0.146	0.044
Van Nuys Arpt.	350	9.767	5.290	3.330	0.873	0.355	0.134	0.040
Van Nuys Arpt.	360	8.435	4.601	2.900	0.751	0.314	0.123	0.037

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{lb}/\text{hr}}\right)$

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Azusa	10	433.580	276.782	196.085	54.156	10.231	2.277	0.686
Azusa	20	467.766	288.074	205.455	59.742	12.978	2.473	0.736
Azusa	30	510.124	323.855	228.526	68.556	16.279	2.398	0.663
Azusa	40	481.466	308.540	218.634	66.134	15.775	2.781	0.722
Azusa	50	511.151	318.042	222.273	67.045	15.589	4.757	1.427
Azusa	60	538.165	318.042	225.857	68.822	16.055	4.757	1.427
Azusa	70	586.371	339.921	237.971	71.847	17.600	5.328	1.627
Azusa	80	565.047	340.581	236.999	72.081	17.010	5.037	1.489
Azusa	90	542.467	336.756	235.966	70.065	15.892	3.069	0.974
Azusa	100	614.922	349.672	238.565	72.586	17.833	5.365	1.636
Azusa	110	607.164	355.932	231.982	70.431	18.908	5.640	1.716
Azusa	120	527.612	317.347	225.746	68.708	16.022	4.386	1.116
Azusa	130	492.207	311.400	220.306	66.929	15.927	2.557	0.717
Azusa	140	473.942	305.203	217.901	66.167	15.365	2.544	0.704
Azusa	150	509.106	323.265	228.171	68.515	16.279	3.978	1.226
Azusa	160	488.820	308.533	216.918	62.076	13.850	3.858	1.230
Azusa	170	474.521	294.724	205.088	55.785	10.957	2.824	0.871
Azusa	180	447.019	272.619	188.262	49.244	7.846	2.433	0.707
Azusa	190	438.760	279.736	198.311	53.940	10.326	2.778	0.684
Azusa	200	477.243	299.939	211.343	60.724	13.607	3.983	1.268
Azusa	210	485.428	308.451	217.084	65.677	15.328	3.996	1.231
Azusa	220	478.712	305.976	218.563	66.452	15.436	2.191	0.662
Azusa	230	491.823	312.849	220.538	66.848	15.768	1.484	0.435
Azusa	240	492.745	315.951	224.802	68.480	15.976	1.442	0.435
Azusa	250	514.036	327.024	231.450	70.431	16.494	2.544	0.754
Azusa	260	537.949	335.881	236.425	71.897	17.161	2.717	0.843
Azusa	270	536.017	337.025	236.135	70.047	15.883	3.628	0.930
Azusa	280	630.768	364.745	235.829	71.699	18.944	5.618	1.736
Azusa	290	544.213	340.528	238.086	71.613	17.152	4.114	1.022
Azusa	300	534.678	336.959	236.612	71.024	16.904	1.958	0.582
Azusa	310	483.645	309.306	220.574	67.081	15.603	1.871	0.522
Azusa	320	494.781	314.487	221.905	66.528	15.826	1.508	0.435
Azusa	330	471.888	301.467	212.957	64.335	15.247	2.520	0.685
Azusa	340	449.591	290.486	207.638	60.450	13.133	2.896	0.853

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{lb}/\text{hr}}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Azusa	350	436.092	278.335	196.824	55.810	10.244	2.160	0.662
Azusa	360	421.269	266.487	187.160	48.989	7.785	2.856	0.864
Banning	10	554.346	364.800	262.791	71.439	14.362	4.446	1.659
Banning	20	596.001	396.902	288.965	86.236	18.404	4.725	1.752
Banning	30	594.233	397.580	290.305	90.953	20.925	4.483	1.647
Banning	40	612.146	406.329	295.145	91.478	20.955	4.546	1.674
Banning	50	625.483	415.541	302.092	94.277	21.675	4.728	1.745
Banning	60	683.136	426.510	309.257	96.568	22.264	4.818	1.776
Banning	70	721.488	454.938	322.115	100.376	23.237	4.831	1.782
Banning	80	720.974	468.071	334.658	103.656	24.088	4.901	1.813
Banning	90	731.700	471.192	334.277	100.346	22.355	4.872	1.805
Banning	100	717.088	465.196	332.446	102.900	23.912	4.770	1.758
Banning	110	738.775	464.251	323.879	97.986	22.661	4.856	1.795
Banning	120	716.795	443.738	315.825	96.733	22.756	4.717	1.741
Banning	130	623.234	412.909	299.427	92.896	21.368	4.686	1.730
Banning	140	610.281	406.098	295.717	92.404	21.251	4.582	1.689
Banning	150	600.895	402.542	294.187	92.294	21.227	4.543	1.675
Banning	160	574.150	381.015	276.699	82.214	17.582	4.453	1.651
Banning	170	571.386	375.988	271.119	73.971	14.616	4.583	1.711
Banning	180	573.584	371.358	263.553	63.917	12.582	4.546	1.696
Banning	190	579.439	378.212	270.892	72.578	14.544	4.577	1.705
Banning	200	591.171	393.751	286.609	85.436	18.233	4.562	1.695
Banning	210	602.800	403.740	295.097	92.684	21.326	4.794	1.771
Banning	220	613.939	408.986	297.907	93.002	21.352	4.687	1.730
Banning	230	627.951	417.714	304.001	95.146	21.898	4.699	1.735
Banning	240	646.658	427.608	309.808	96.638	22.273	4.657	1.722
Banning	250	666.322	434.388	311.527	95.955	22.134	4.655	1.715
Banning	260	715.455	463.999	331.529	102.590	23.840	4.693	1.727
Banning	270	714.319	458.232	324.190	97.132	21.705	4.687	1.730
Banning	280	684.571	444.547	317.276	97.635	22.656	4.645	1.709
Banning	290	658.096	426.825	304.750	93.424	21.699	4.650	1.708
Banning	300	644.285	425.800	308.381	96.133	22.154	4.571	1.684
Banning	310	606.459	402.794	292.735	91.342	21.036	4.586	1.691
Banning	320	606.234	401.343	291.014	89.925	20.584	4.934	1.829
Banning	330	580.172	385.842	280.465	87.481	20.170	4.877	1.807

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{lb/hr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Banning	340	580.914	383.135	276.663	80.992	17.291	4.410	1.610
Banning	350	553.212	356.598	252.231	70.550	13.649	4.506	1.675
Banning	360	549.834	354.097	250.074	59.580	12.358	4.732	1.760
Burbank Arpt.	10	541.054	352.228	252.106	68.460	13.057	3.552	1.317
Burbank Arpt.	20	578.562	378.340	271.184	78.469	16.812	3.563	1.315
Burbank Arpt.	30	557.610	366.833	266.238	83.004	19.163	3.437	1.258
Burbank Arpt.	40	575.304	377.234	271.670	83.533	19.283	3.415	1.250
Burbank Arpt.	50	588.731	386.506	278.806	86.076	19.882	3.396	1.239
Burbank Arpt.	60	615.120	399.190	286.845	88.691	20.543	3.513	1.282
Burbank Arpt.	70	641.687	415.706	296.760	90.909	21.052	3.571	1.274
Burbank Arpt.	80	660.244	424.449	301.817	93.097	21.747	3.597	1.306
Burbank Arpt.	90	687.435	434.806	304.744	89.865	20.223	3.542	1.298
Burbank Arpt.	100	672.130	432.422	307.495	94.765	22.143	3.632	1.327
Burbank Arpt.	110	635.094	407.801	292.012	90.100	20.953	3.603	1.318
Burbank Arpt.	120	604.909	392.453	282.115	87.634	20.295	3.596	1.317
Burbank Arpt.	130	613.604	401.912	289.017	88.758	20.526	3.608	1.320
Burbank Arpt.	140	576.286	377.054	271.074	83.020	19.160	3.648	1.339
Burbank Arpt.	150	569.984	373.168	268.503	83.053	19.136	3.627	1.330
Burbank Arpt.	160	616.124	398.931	283.546	80.611	17.228	3.493	1.287
Burbank Arpt.	170	599.553	382.886	268.786	73.996	13.363	3.554	1.282
Burbank Arpt.	180	554.869	355.187	249.758	59.157	9.772	3.364	1.246
Burbank Arpt.	190	542.899	353.276	252.966	68.443	13.083	3.400	1.257
Burbank Arpt.	200	553.559	364.262	263.019	77.523	16.662	3.452	1.268
Burbank Arpt.	210	566.089	369.143	267.499	83.140	19.201	3.320	1.203
Burbank Arpt.	220	576.031	377.598	271.814	83.303	19.237	3.560	1.298
Burbank Arpt.	230	602.883	397.805	287.167	88.591	20.495	4.829	1.320
Burbank Arpt.	240	638.055	409.069	289.104	87.266	20.196	3.846	1.312
Burbank Arpt.	250	634.772	411.620	294.363	90.784	21.104	3.542	1.289
Burbank Arpt.	260	661.431	425.245	302.242	92.953	21.708	3.503	1.277
Burbank Arpt.	270	672.155	430.127	304.179	91.056	20.408	3.541	1.295
Burbank Arpt.	280	648.430	414.348	294.553	90.935	21.312	3.610	1.318
Burbank Arpt.	290	626.525	407.193	291.818	90.277	20.967	3.596	1.316
Burbank Arpt.	300	599.500	390.215	279.668	85.626	19.768	3.607	1.322
Burbank Arpt.	310	579.116	378.881	272.313	84.388	19.476	3.610	1.323
Burbank Arpt.	320	590.622	390.245	282.052	86.973	20.109	3.567	1.306

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{lb/hr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Burbank Arpt.	330	564.230	375.329	272.203	84.414	19.614	3.574	1.310
Burbank Arpt.	340	609.268	399.376	287.078	83.965	18.047	3.594	1.326
Burbank Arpt.	350	564.386	364.773	258.552	69.076	13.186	4.339	1.328
Burbank Arpt.	360	524.268	336.139	237.092	58.758	11.506	4.339	1.315
Central L.A.	10	458.924	256.779	161.946	40.115	10.961	3.766	1.235
Central L.A.	20	403.176	223.906	156.117	44.204	10.032	3.042	0.841
Central L.A.	30	368.585	220.870	152.750	45.912	10.970	2.957	0.841
Central L.A.	40	378.495	238.491	167.689	50.144	12.037	2.765	0.903
Central L.A.	50	373.399	233.364	162.877	48.107	11.583	2.267	0.712
Central L.A.	60	386.567	237.565	164.019	48.339	11.583	2.911	0.945
Central L.A.	70	390.714	241.397	167.478	49.932	12.087	2.416	0.766
Central L.A.	80	414.962	251.547	174.822	52.845	12.897	2.918	0.945
Central L.A.	90	409.895	249.212	171.563	50.272	11.874	2.616	0.786
Central L.A.	100	406.610	250.177	173.193	51.862	12.650	2.781	0.879
Central L.A.	110	401.968	245.932	170.342	50.645	12.262	1.665	0.479
Central L.A.	120	389.493	242.901	169.770	50.791	12.244	1.512	0.411
Central L.A.	130	366.688	226.574	157.332	47.045	11.251	2.004	0.496
Central L.A.	140	371.073	233.737	164.267	49.093	11.804	2.473	0.706
Central L.A.	150	361.926	226.270	158.334	47.011	11.326	2.194	0.650
Central L.A.	160	371.758	231.657	161.767	45.892	10.362	1.882	0.574
Central L.A.	170	362.817	224.408	155.788	43.725	8.212	1.801	0.494
Central L.A.	180	350.878	213.518	146.505	36.475	6.085	1.536	0.445
Central L.A.	190	360.185	221.110	152.318	40.059	8.195	1.276	0.399
Central L.A.	200	371.554	231.583	161.771	45.985	10.382	1.454	0.432
Central L.A.	210	373.431	234.286	164.258	48.856	11.738	1.977	0.555
Central L.A.	220	373.121	233.474	163.844	48.785	11.730	1.977	0.632
Central L.A.	230	379.190	237.886	166.780	49.800	11.978	1.391	0.399
Central L.A.	240	395.634	246.673	172.205	51.315	12.352	1.768	0.543
Central L.A.	250	401.306	249.544	174.102	52.382	12.687	1.709	0.495
Central L.A.	260	398.143	244.435	169.665	51.033	12.345	2.741	0.832
Central L.A.	270	396.548	242.555	167.680	49.202	11.470	2.392	0.657
Central L.A.	280	415.222	256.352	178.107	53.786	13.103	2.139	0.665
Central L.A.	290	412.005	255.325	177.788	53.312	12.879	1.911	0.637
Central L.A.	300	394.906	243.682	168.845	50.024	12.116	1.506	0.399
Central L.A.	310	371.185	231.695	161.634	47.728	11.507	2.252	0.636

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{lb}/\text{hr}}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Central L.A.	320	378.480	238.283	167.455	50.036	12.008	2.030	0.533
Central L.A.	330	363.531	224.012	154.343	46.045	11.000	2.349	0.740
Central L.A.	340	338.080	212.744	149.555	43.531	9.588	2.203	0.657
Central L.A.	350	331.086	206.685	144.388	40.762	7.643	2.457	0.807
Central L.A.	360	377.507	205.938	140.780	36.081	6.938	2.734	0.721
Chino Arpt.	10	642.820	428.216	312.459	86.815	18.768	6.392	2.409
Chino Arpt.	20	658.643	440.731	321.231	97.027	21.657	6.361	2.388
Chino Arpt.	30	679.461	451.408	327.573	104.315	23.958	6.355	2.375
Chino Arpt.	40	669.257	451.269	330.861	104.267	23.956	6.476	2.421
Chino Arpt.	50	713.376	475.740	344.156	106.218	24.407	6.423	2.399
Chino Arpt.	60	709.037	473.530	344.838	108.750	25.052	6.489	2.407
Chino Arpt.	70	771.709	511.866	369.159	114.255	26.321	6.422	2.400
Chino Arpt.	80	787.976	518.345	373.529	117.083	27.169	6.488	2.419
Chino Arpt.	90	813.547	528.522	376.868	113.774	25.509	6.412	2.399
Chino Arpt.	100	784.545	516.206	371.538	115.710	26.860	6.516	2.433
Chino Arpt.	110	781.782	514.951	368.553	112.053	25.746	6.442	2.405
Chino Arpt.	120	751.814	505.139	368.673	116.136	26.748	6.422	2.400
Chino Arpt.	130	682.399	458.600	335.529	107.116	24.647	6.418	2.401
Chino Arpt.	140	699.885	474.511	347.812	109.316	25.162	6.379	2.384
Chino Arpt.	150	725.822	480.500	345.576	107.154	24.636	6.433	2.405
Chino Arpt.	160	652.541	434.845	318.104	96.883	21.896	6.284	2.357
Chino Arpt.	170	675.411	439.337	312.013	85.807	18.746	6.016	2.263
Chino Arpt.	180	675.411	439.337	311.114	80.185	16.344	6.311	2.382
Chino Arpt.	190	678.733	450.371	324.577	89.041	18.892	6.200	2.331
Chino Arpt.	200	694.365	464.951	337.163	100.011	21.655	6.299	2.354
Chino Arpt.	210	697.271	469.451	341.698	104.959	23.890	6.548	2.452
Chino Arpt.	220	742.258	501.383	367.149	115.339	26.455	6.331	2.366
Chino Arpt.	230	733.230	495.541	362.154	113.704	26.227	6.370	2.372
Chino Arpt.	240	756.945	505.687	366.429	113.449	26.057	6.343	2.358
Chino Arpt.	250	824.293	542.745	390.087	120.048	27.515	6.413	2.396
Chino Arpt.	260	793.377	519.273	372.869	116.455	27.034	6.446	2.392
Chino Arpt.	270	858.058	559.710	399.935	121.272	26.903	6.410	2.399
Chino Arpt.	280	792.414	518.142	373.586	117.465	27.263	6.305	2.349
Chino Arpt.	290	747.233	494.276	359.136	113.260	26.162	6.452	2.405
Chino Arpt.	300	747.004	501.161	365.297	114.666	26.374	6.241	2.329

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{lb}/\text{hr}}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Chino Arpt.	310	728.322	485.528	351.550	107.460	24.462	6.212	2.321
Chino Arpt.	320	692.396	470.521	346.640	110.013	25.218	6.300	2.351
Chino Arpt.	330	658.701	444.741	328.257	105.077	24.218	6.396	2.390
Chino Arpt.	340	698.645	471.429	344.896	102.921	21.783	6.285	2.358
Chino Arpt.	350	679.521	451.753	326.532	88.800	18.792	6.188	2.329
Chino Arpt.	360	658.509	432.601	307.741	72.625	16.363	6.176	2.331
Desert Hot Springs Arpt.	10	616.051	411.060	299.674	83.098	19.813	6.741	2.533
Desert Hot Springs Arpt.	20	602.597	402.856	293.538	87.310	21.941	6.641	2.483
Desert Hot Springs Arpt.	30	647.392	433.381	315.602	98.303	23.991	6.795	2.549
Desert Hot Springs Arpt.	40	643.973	435.465	320.031	101.279	24.343	6.762	2.524
Desert Hot Springs Arpt.	50	655.740	432.912	314.644	98.330	24.729	6.792	2.543
Desert Hot Springs Arpt.	60	655.545	436.321	317.406	99.849	24.676	6.699	2.496
Desert Hot Springs Arpt.	70	674.313	448.026	325.319	102.144	25.515	6.642	2.484
Desert Hot Springs Arpt.	80	760.018	495.818	354.924	109.571	26.511	6.722	2.505
Desert Hot Springs Arpt.	90	757.749	491.091	350.540	106.194	25.657	6.801	2.550
Desert Hot Springs Arpt.	100	743.577	485.593	348.353	108.538	26.472	6.873	2.564
Desert Hot Springs Arpt.	110	695.010	459.705	332.992	104.606	25.722	6.790	2.534
Desert Hot Springs Arpt.	120	674.819	444.109	320.026	99.766	24.692	6.897	2.578
Desert Hot Springs Arpt.	130	644.117	433.517	317.848	100.698	24.472	7.102	2.656
Desert Hot Springs Arpt.	140	645.680	431.013	313.911	98.476	24.090	7.112	2.671
Desert Hot Springs Arpt.	150	673.601	449.706	326.197	99.766	24.155	7.015	2.632
Desert Hot Springs Arpt.	160	614.019	411.537	300.373	89.586	22.006	7.120	2.682
Desert Hot Springs Arpt.	170	603.086	402.742	293.212	81.153	19.660	6.989	2.645
Desert Hot Springs Arpt.	180	594.892	392.076	281.420	68.031	17.292	6.978	2.642
Desert Hot Springs Arpt.	190	616.760	407.582	294.161	80.603	19.622	6.934	2.622
Desert Hot Springs Arpt.	200	615.267	413.514	302.641	91.073	22.089	7.057	2.663
Desert Hot Springs Arpt.	210	609.461	409.584	300.702	95.822	24.064	6.791	2.545
Desert Hot Springs Arpt.	220	634.278	426.107	311.893	98.100	23.921	6.939	2.590
Desert Hot Springs Arpt.	230	641.944	427.461	313.074	99.815	24.604	6.751	2.526
Desert Hot Springs Arpt.	240	644.397	433.001	317.204	100.772	25.052	6.834	2.558
Desert Hot Springs Arpt.	250	654.935	431.954	311.615	98.551	25.660	6.832	2.559
Desert Hot Springs Arpt.	260	714.189	465.132	332.345	103.319	26.540	6.911	2.590
Desert Hot Springs Arpt.	270	741.377	483.935	346.776	105.777	25.500	6.624	2.480
Desert Hot Springs Arpt.	280	731.496	480.302	345.713	108.156	26.261	7.150	2.536
Desert Hot Springs Arpt.	290	693.493	462.531	336.871	106.711	25.818	6.951	2.603

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{lb/hr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Desert Hot Springs Arpt.	300	658.657	436.567	316.313	98.620	24.760	7.035	2.630
Desert Hot Springs Arpt.	310	639.979	428.610	313.687	98.949	24.476	6.995	2.626
Desert Hot Springs Arpt.	320	612.227	407.998	298.945	93.971	24.229	7.011	2.620
Desert Hot Springs Arpt.	330	622.008	419.929	308.241	97.350	23.995	7.065	2.655
Desert Hot Springs Arpt.	340	595.034	401.576	295.061	89.424	22.254	6.942	2.616
Desert Hot Springs Arpt.	350	601.417	399.314	289.481	79.570	19.679	6.805	2.558
Desert Hot Springs Arpt.	360	593.815	384.390	272.049	66.295	17.432	6.941	2.631
Fontana	10	595.555	377.378	264.406	69.409	13.551	2.997	0.914
Fontana	20	558.453	367.146	265.183	78.168	16.718	2.565	0.928
Fontana	30	568.348	375.919	272.629	84.547	19.462	2.542	0.908
Fontana	40	607.773	388.602	277.117	85.655	19.696	3.007	0.918
Fontana	50	643.346	410.444	290.140	86.977	20.279	3.827	1.179
Fontana	60	655.366	415.194	292.242	88.447	20.483	3.665	1.100
Fontana	70	666.016	414.313	296.167	91.137	21.102	4.890	1.350
Fontana	80	703.606	437.337	304.288	93.426	21.768	4.890	1.350
Fontana	90	685.202	432.209	305.001	91.089	20.370	3.357	1.010
Fontana	100	670.533	429.270	304.755	93.515	21.771	4.644	1.303
Fontana	110	639.042	413.596	295.608	90.943	21.056	3.432	0.930
Fontana	120	632.945	396.839	285.370	88.128	20.345	2.580	0.923
Fontana	130	664.414	425.919	301.345	89.954	20.859	2.521	0.897
Fontana	140	594.281	383.149	277.041	85.623	19.687	2.578	0.907
Fontana	150	599.345	381.320	271.172	83.925	19.315	3.542	0.909
Fontana	160	612.520	391.623	276.191	78.206	16.947	5.360	1.478
Fontana	170	632.113	401.589	282.922	75.204	14.649	3.542	0.889
Fontana	180	593.428	368.582	255.055	61.815	10.057	2.499	0.913
Fontana	190	599.418	378.157	266.689	71.025	13.936	5.166	1.344
Fontana	200	599.418	377.714	266.840	78.838	18.321	6.007	1.720
Fontana	210	635.062	400.025	278.641	84.740	19.518	3.268	0.905
Fontana	220	649.915	414.477	292.037	85.964	19.848	2.949	0.924
Fontana	230	673.775	431.912	305.588	91.200	21.134	4.569	1.258
Fontana	240	686.103	433.875	305.162	91.589	21.375	4.186	1.087
Fontana	250	698.135	440.737	309.706	93.568	22.004	2.527	0.898
Fontana	260	735.305	460.142	321.242	96.745	22.843	2.543	0.903
Fontana	270	680.570	433.174	305.581	91.132	20.365	2.523	0.901
Fontana	280	669.126	427.978	303.768	93.183	21.693	2.589	0.891

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{lb/hr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Fontana	290	637.369	412.604	294.999	90.886	21.059	2.983	0.903
Fontana	300	609.149	397.720	286.050	88.360	20.399	2.983	0.889
Fontana	310	657.164	415.923	291.100	86.140	19.831	2.931	0.889
Fontana	320	671.836	433.820	308.972	93.549	21.752	2.519	0.899
Fontana	330	596.176	375.953	272.453	84.453	19.436	4.087	1.207
Fontana	340	584.230	370.838	265.321	78.206	16.722	3.610	1.000
Fontana	350	553.310	355.549	254.271	69.346	13.044	2.471	0.897
Fontana	360	582.813	365.363	253.511	61.815	9.583	2.514	0.918
Fullerton Arpt.	10	525.005	334.672	238.339	64.012	12.246	3.316	0.944
Fullerton Arpt.	20	557.124	353.135	252.693	73.676	15.895	3.750	1.049
Fullerton Arpt.	30	572.146	367.322	261.743	80.101	18.510	3.414	0.998
Fullerton Arpt.	40	627.931	407.311	291.064	88.334	20.424	3.481	0.969
Fullerton Arpt.	50	593.830	380.314	268.901	80.659	18.613	3.481	0.969
Fullerton Arpt.	60	594.858	381.074	271.852	83.062	19.216	2.529	0.775
Fullerton Arpt.	70	634.716	403.605	284.740	86.230	20.174	2.718	0.827
Fullerton Arpt.	80	635.022	401.222	282.655	86.473	20.215	2.557	0.813
Fullerton Arpt.	90	663.283	414.079	288.279	84.435	19.035	2.753	0.818
Fullerton Arpt.	100	675.205	427.228	300.456	91.209	21.360	3.119	0.951
Fullerton Arpt.	110	619.212	394.592	279.182	84.761	19.713	2.602	0.790
Fullerton Arpt.	120	594.910	383.434	273.541	83.422	19.303	2.690	0.819
Fullerton Arpt.	130	594.651	385.436	274.916	83.183	19.281	2.145	0.751
Fullerton Arpt.	140	623.123	403.084	287.325	86.605	19.982	2.367	0.771
Fullerton Arpt.	150	576.506	367.470	263.186	80.248	18.574	2.642	0.771
Fullerton Arpt.	160	576.506	367.470	258.761	75.528	16.070	3.928	1.069
Fullerton Arpt.	170	532.633	340.325	242.018	66.266	12.434	2.750	0.794
Fullerton Arpt.	180	554.115	345.538	238.696	59.212	8.951	2.281	0.752
Fullerton Arpt.	190	579.269	369.050	259.861	68.490	13.259	2.309	0.719
Fullerton Arpt.	200	565.356	366.331	261.786	75.924	16.318	2.076	0.737
Fullerton Arpt.	210	595.546	387.817	277.954	84.562	19.499	2.118	0.746
Fullerton Arpt.	220	572.559	373.643	268.128	81.923	18.938	2.017	0.717
Fullerton Arpt.	230	572.990	370.075	264.598	80.550	18.590	2.123	0.751
Fullerton Arpt.	240	600.959	386.486	274.545	83.019	19.244	2.742	0.781
Fullerton Arpt.	250	613.452	391.759	277.664	84.484	19.619	2.843	0.838
Fullerton Arpt.	260	645.870	408.495	287.624	87.556	20.508	2.254	0.791
Fullerton Arpt.	270	636.814	401.552	281.815	83.641	18.784	2.664	0.792

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{lb}/\text{hr}}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Fullerton Arpt.	280	641.722	405.069	284.863	86.605	20.309	3.417	1.061
Fullerton Arpt.	290	612.941	389.952	276.159	84.380	19.643	3.797	1.104
Fullerton Arpt.	300	624.531	401.216	284.659	85.904	19.899	2.413	0.755
Fullerton Arpt.	310	609.877	392.743	279.003	83.570	19.225	2.218	0.780
Fullerton Arpt.	320	619.069	398.742	283.094	84.576	19.504	2.689	0.762
Fullerton Arpt.	330	590.374	371.235	260.143	78.967	18.220	2.689	0.775
Fullerton Arpt.	340	540.904	350.722	250.857	72.899	15.660	3.011	0.861
Fullerton Arpt.	350	529.475	339.387	241.264	64.591	12.414	2.678	0.819
Fullerton Arpt.	360	516.116	325.842	227.460	58.332	8.708	2.954	0.868
Hawthorne Arpt.	10	514.012	332.066	236.785	63.747	12.249	1.864	0.667
Hawthorne Arpt.	20	530.824	343.533	247.007	72.430	15.598	2.177	0.644
Hawthorne Arpt.	30	550.972	358.509	257.044	78.728	18.216	2.730	0.743
Hawthorne Arpt.	40	562.194	368.460	264.675	80.954	18.820	3.308	0.906
Hawthorne Arpt.	50	570.513	370.223	265.147	80.996	18.733	3.144	0.928
Hawthorne Arpt.	60	582.449	374.945	267.638	82.103	19.036	2.669	0.746
Hawthorne Arpt.	70	606.229	388.947	276.336	84.392	19.633	2.900	0.893
Hawthorne Arpt.	80	626.651	398.669	281.745	86.178	20.189	2.707	0.761
Hawthorne Arpt.	90	625.889	397.677	280.269	83.676	18.838	2.982	0.865
Hawthorne Arpt.	100	622.488	395.017	278.901	85.402	20.058	2.031	0.687
Hawthorne Arpt.	110	641.584	409.857	289.986	88.034	20.510	3.025	0.884
Hawthorne Arpt.	120	585.272	377.689	269.419	82.255	19.092	2.429	0.658
Hawthorne Arpt.	130	569.815	369.734	264.366	80.566	18.692	1.936	0.680
Hawthorne Arpt.	140	559.409	361.095	259.599	79.519	18.361	1.931	0.679
Hawthorne Arpt.	150	565.898	368.396	263.926	80.106	18.470	1.892	0.662
Hawthorne Arpt.	160	537.302	348.900	249.932	72.833	15.697	1.923	0.685
Hawthorne Arpt.	170	523.917	338.942	241.508	65.550	12.568	1.893	0.629
Hawthorne Arpt.	180	503.721	318.747	223.846	58.110	8.671	1.836	0.661
Hawthorne Arpt.	190	519.397	334.440	237.845	63.909	12.300	1.825	0.654
Hawthorne Arpt.	200	546.776	355.361	254.383	74.063	15.973	1.766	0.629
Hawthorne Arpt.	210	546.705	354.200	254.101	78.098	18.056	4.053	0.974
Hawthorne Arpt.	220	554.677	360.863	258.708	79.060	18.358	4.858	1.304
Hawthorne Arpt.	230	562.160	364.705	261.610	80.148	18.529	2.368	0.654
Hawthorne Arpt.	240	582.472	375.399	267.638	82.103	19.036	2.508	0.738
Hawthorne Arpt.	250	599.180	382.983	271.602	83.145	19.338	2.634	0.746
Hawthorne Arpt.	260	624.632	397.667	281.071	85.986	20.154	1.942	0.676

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{lb/hr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Hawthorne Arpt.	270	629.694	398.270	280.084	83.503	18.838	2.042	0.692
Hawthorne Arpt.	280	619.889	393.652	277.692	84.424	19.721	2.015	0.692
Hawthorne Arpt.	290	606.451	387.577	274.550	83.534	19.464	2.031	0.679
Hawthorne Arpt.	300	583.728	376.852	268.866	82.037	19.020	2.039	0.687
Hawthorne Arpt.	310	594.130	383.905	273.481	82.686	19.170	2.996	0.844
Hawthorne Arpt.	320	552.100	355.399	254.474	77.758	17.976	2.279	0.680
Hawthorne Arpt.	330	553.507	359.399	257.323	78.276	18.099	2.585	0.748
Hawthorne Arpt.	340	549.534	357.058	255.071	73.921	16.004	2.488	0.712
Hawthorne Arpt.	350	515.084	332.354	236.846	65.593	12.204	1.898	0.681
Hawthorne Arpt.	360	496.248	314.588	220.472	55.587	8.609	1.856	0.668
John Wayne Int'l Arpt.	10	672.584	448.902	327.400	90.651	16.954	5.348	2.008
John Wayne Int'l Arpt.	20	684.277	455.972	331.174	100.572	21.353	5.438	2.034
John Wayne Int'l Arpt.	30	694.227	470.709	347.135	110.291	25.263	5.453	2.028
John Wayne Int'l Arpt.	40	706.756	477.146	350.068	110.588	25.341	5.471	2.038
John Wayne Int'l Arpt.	50	749.656	506.504	371.481	117.427	26.944	5.469	2.036
John Wayne Int'l Arpt.	60	747.612	499.657	363.834	114.205	26.226	5.463	2.032
John Wayne Int'l Arpt.	70	784.338	519.645	376.088	118.198	27.276	5.416	2.013
John Wayne Int'l Arpt.	80	869.571	571.658	410.973	128.176	29.651	6.062	2.011
John Wayne Int'l Arpt.	90	858.802	559.722	399.805	121.070	26.855	5.452	2.029
John Wayne Int'l Arpt.	100	833.291	543.403	389.033	122.093	28.297	5.391	1.997
John Wayne Int'l Arpt.	110	787.108	521.703	377.701	118.210	27.229	5.327	1.974
John Wayne Int'l Arpt.	120	745.760	491.031	357.709	113.562	26.087	5.336	1.977
John Wayne Int'l Arpt.	130	724.852	488.513	357.906	112.832	25.829	5.473	2.037
John Wayne Int'l Arpt.	140	706.012	474.936	347.541	110.416	25.271	5.286	1.965
John Wayne Int'l Arpt.	150	704.566	469.779	341.396	108.245	24.874	5.479	2.041
John Wayne Int'l Arpt.	160	679.070	456.664	335.596	101.386	21.509	5.225	1.951
John Wayne Int'l Arpt.	170	677.735	447.792	324.677	89.106	16.684	5.243	1.968
John Wayne Int'l Arpt.	180	658.425	435.075	312.482	75.529	13.949	5.016	1.879
John Wayne Int'l Arpt.	190	663.378	438.551	320.360	88.977	16.647	5.197	1.936
John Wayne Int'l Arpt.	200	679.578	454.315	330.584	99.726	21.186	5.351	1.993
John Wayne Int'l Arpt.	210	703.370	473.049	348.677	110.815	25.415	5.290	1.966
John Wayne Int'l Arpt.	220	684.206	461.165	339.671	107.759	24.676	5.431	2.020
John Wayne Int'l Arpt.	230	712.029	482.109	354.715	112.850	25.881	5.405	2.011
John Wayne Int'l Arpt.	240	746.784	495.189	359.199	111.542	25.580	5.429	2.014
John Wayne Int'l Arpt.	250	780.123	516.807	374.222	117.326	27.047	5.444	2.022

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{lb}/\text{hr}}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
John Wayne Int'l Arpt.	260	822.658	538.223	386.169	120.130	27.805	5.434	2.016
John Wayne Int'l Arpt.	270	844.205	550.887	393.599	119.066	26.366	5.358	1.992
John Wayne Int'l Arpt.	280	823.780	543.240	391.875	122.773	28.398	5.480	2.033
John Wayne Int'l Arpt.	290	776.427	507.796	364.044	113.395	26.193	5.391	2.001
John Wayne Int'l Arpt.	300	726.295	490.217	359.843	114.644	26.380	5.391	2.003
John Wayne Int'l Arpt.	310	719.546	482.031	353.887	112.000	25.653	5.416	2.015
John Wayne Int'l Arpt.	320	702.156	473.574	348.395	110.323	25.236	5.381	2.003
John Wayne Int'l Arpt.	330	687.064	468.444	346.688	111.026	25.489	5.374	2.000
John Wayne Int'l Arpt.	340	686.520	463.780	340.188	102.409	21.722	5.349	1.998
John Wayne Int'l Arpt.	350	675.337	449.787	326.875	90.603	16.949	5.348	2.006
John Wayne Int'l Arpt.	360	654.879	427.582	306.953	73.901	14.214	5.332	2.003
Lake Elsinore	10	636.760	403.326	283.088	74.359	15.684	5.359	1.461
Lake Elsinore	20	625.700	403.902	287.331	83.141	18.128	4.361	1.051
Lake Elsinore	30	570.221	377.969	274.533	85.418	19.681	4.019	1.132
Lake Elsinore	40	655.738	412.641	287.053	85.940	19.763	3.905	1.040
Lake Elsinore	50	672.002	428.493	301.747	88.916	20.513	5.117	1.543
Lake Elsinore	60	700.117	445.534	313.813	93.552	21.718	3.068	1.051
Lake Elsinore	70	648.060	420.911	301.535	93.171	21.588	3.854	1.107
Lake Elsinore	80	671.257	431.070	306.377	94.255	21.961	3.386	1.023
Lake Elsinore	90	685.093	437.386	308.973	92.395	20.659	2.914	1.012
Lake Elsinore	100	673.177	432.455	307.427	94.606	22.043	2.999	1.043
Lake Elsinore	110	641.603	414.178	296.335	91.393	21.178	3.189	1.031
Lake Elsinore	120	617.332	401.714	289.277	89.528	20.672	3.745	1.036
Lake Elsinore	130	638.325	408.202	288.454	87.752	20.209	5.063	1.408
Lake Elsinore	140	666.795	430.069	306.035	92.479	21.513	5.885	1.625
Lake Elsinore	150	668.214	431.577	307.388	93.022	21.632	4.906	1.214
Lake Elsinore	160	643.136	410.065	288.832	81.409	17.745	3.869	1.165
Lake Elsinore	170	627.579	398.611	279.563	77.855	14.354	3.143	1.039
Lake Elsinore	180	600.062	373.940	258.680	62.191	10.117	2.911	1.016
Lake Elsinore	190	615.221	381.525	262.637	70.240	13.760	2.823	1.032
Lake Elsinore	200	659.608	424.340	301.215	86.617	18.763	2.840	1.029
Lake Elsinore	210	663.508	429.330	305.968	92.594	21.552	3.354	1.030
Lake Elsinore	220	623.978	401.975	284.530	85.862	19.747	2.915	1.052
Lake Elsinore	230	631.352	407.454	288.998	87.666	20.329	2.888	1.040
Lake Elsinore	240	646.089	406.425	288.257	89.028	20.540	4.365	1.191

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{lb}/\text{hr}}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Lake Elsinore	250	710.866	435.906	304.074	91.128	21.377	3.924	1.015
Lake Elsinore	260	732.227	454.975	315.484	93.889	21.858	3.247	0.907
Lake Elsinore	270	717.379	444.254	308.488	91.523	20.763	2.916	1.053
Lake Elsinore	280	674.102	432.896	307.606	94.507	22.002	2.658	0.955
Lake Elsinore	290	668.206	428.447	302.988	92.245	21.789	2.833	1.014
Lake Elsinore	300	615.267	402.382	289.639	89.501	20.650	3.134	1.006
Lake Elsinore	310	643.741	414.338	293.540	87.814	20.432	3.829	1.017
Lake Elsinore	320	624.249	400.635	284.055	86.730	20.051	3.829	1.050
Lake Elsinore	330	614.059	394.279	278.695	86.320	19.888	3.594	1.051
Lake Elsinore	340	626.730	404.841	288.174	83.529	18.219	2.983	1.034
Lake Elsinore	350	561.500	361.045	258.946	70.182	13.335	3.416	1.016
Lake Elsinore	360	608.113	376.331	258.658	62.338	10.189	3.308	1.044
Long Beach Arpt.	10	561.864	368.062	266.119	73.148	15.861	5.377	1.787
Long Beach Arpt.	20	568.663	376.957	273.281	80.765	17.346	4.825	1.803
Long Beach Arpt.	30	578.747	386.111	282.832	89.227	20.600	4.775	1.770
Long Beach Arpt.	40	573.930	382.945	279.309	87.490	20.181	4.719	1.753
Long Beach Arpt.	50	600.972	396.822	287.085	88.667	20.389	4.825	1.790
Long Beach Arpt.	60	608.618	401.531	290.407	90.189	20.870	4.723	1.754
Long Beach Arpt.	70	636.495	416.971	300.375	93.642	21.771	4.747	1.756
Long Beach Arpt.	80	685.865	442.980	315.701	97.562	22.813	4.754	1.762
Long Beach Arpt.	90	693.527	445.966	317.426	95.973	21.451	4.843	1.800
Long Beach Arpt.	100	683.641	442.079	317.093	99.116	23.125	4.853	1.801
Long Beach Arpt.	110	662.380	427.858	303.807	95.205	22.116	4.796	1.779
Long Beach Arpt.	120	627.923	415.032	300.561	93.817	21.713	4.874	1.812
Long Beach Arpt.	130	613.124	399.384	289.849	90.519	20.870	4.845	1.801
Long Beach Arpt.	140	612.776	406.607	294.992	92.402	21.293	4.865	1.799
Long Beach Arpt.	150	593.134	397.271	289.452	90.361	20.933	4.804	1.787
Long Beach Arpt.	160	573.722	381.007	276.988	82.637	17.707	4.806	1.794
Long Beach Arpt.	170	561.254	369.045	265.902	72.898	14.049	4.712	1.764
Long Beach Arpt.	180	553.595	359.623	255.712	62.926	12.213	4.484	1.685
Long Beach Arpt.	190	592.449	387.971	278.560	76.021	14.469	4.525	1.696
Long Beach Arpt.	200	627.987	411.614	295.010	85.665	18.354	4.593	1.708
Long Beach Arpt.	210	575.765	386.312	282.637	88.889	20.514	4.653	1.725
Long Beach Arpt.	220	605.752	404.892	295.431	92.491	21.300	4.781	1.777
Long Beach Arpt.	230	606.743	400.120	291.671	91.643	21.189	5.729	1.747

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{lb/hr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Long Beach Arpt.	240	687.635	452.494	325.678	100.495	23.269	4.699	1.743
Long Beach Arpt.	250	701.405	450.380	317.945	98.168	22.835	4.851	1.801
Long Beach Arpt.	260	689.597	446.988	320.348	99.634	23.221	4.721	1.749
Long Beach Arpt.	270	698.948	452.024	321.744	97.216	21.712	4.753	1.766
Long Beach Arpt.	280	699.315	450.848	320.131	98.277	22.937	4.778	1.769
Long Beach Arpt.	290	691.388	443.360	313.024	95.202	22.070	4.830	1.794
Long Beach Arpt.	300	625.467	412.914	298.726	93.292	21.604	4.795	1.781
Long Beach Arpt.	310	648.092	429.344	310.731	95.890	22.038	4.855	1.804
Long Beach Arpt.	320	592.319	393.929	286.612	89.434	20.625	4.831	1.797
Long Beach Arpt.	330	584.150	384.544	279.132	88.056	20.320	4.800	1.786
Long Beach Arpt.	340	569.299	380.223	277.276	82.969	17.781	4.805	1.795
Long Beach Arpt.	350	559.539	364.519	263.799	72.448	14.140	4.784	1.793
Long Beach Arpt.	360	559.539	361.978	256.504	66.872	12.479	4.755	1.788
Los Angeles Int'l Arpt.	10	524.309	343.509	247.218	67.434	14.102	4.786	1.795
Los Angeles Int'l Arpt.	20	525.659	344.867	250.963	75.306	16.211	4.805	1.794
Los Angeles Int'l Arpt.	30	557.611	368.902	266.822	82.151	19.000	4.811	1.788
Los Angeles Int'l Arpt.	40	567.866	375.357	271.838	83.923	19.324	4.833	1.794
Los Angeles Int'l Arpt.	50	555.677	366.342	265.941	82.979	19.194	4.861	1.809
Los Angeles Int'l Arpt.	60	572.781	374.771	271.636	84.975	19.719	4.891	1.817
Los Angeles Int'l Arpt.	70	608.763	397.144	285.299	88.594	20.638	4.923	1.825
Los Angeles Int'l Arpt.	80	634.590	411.301	293.970	91.283	21.362	4.913	1.822
Los Angeles Int'l Arpt.	90	650.555	417.801	296.104	89.135	19.995	4.899	1.824
Los Angeles Int'l Arpt.	100	632.373	405.683	288.973	89.653	20.959	4.960	1.841
Los Angeles Int'l Arpt.	110	604.793	393.080	282.629	87.798	20.433	4.841	1.798
Los Angeles Int'l Arpt.	120	577.878	377.385	272.358	85.495	19.858	4.907	1.824
Los Angeles Int'l Arpt.	130	548.860	363.684	264.414	82.728	19.138	4.798	1.779
Los Angeles Int'l Arpt.	140	551.873	365.153	265.005	82.449	19.059	4.743	1.765
Los Angeles Int'l Arpt.	150	535.862	356.837	259.886	81.222	18.811	4.826	1.796
Los Angeles Int'l Arpt.	160	531.963	351.845	254.994	75.643	16.298	4.833	1.804
Los Angeles Int'l Arpt.	170	517.601	336.477	242.314	66.447	13.996	4.805	1.796
Los Angeles Int'l Arpt.	180	508.330	329.034	233.677	57.189	12.645	4.825	1.814
Los Angeles Int'l Arpt.	190	512.158	336.791	242.877	66.416	14.195	4.783	1.793
Los Angeles Int'l Arpt.	200	529.070	349.210	254.128	75.970	16.366	4.853	1.812
Los Angeles Int'l Arpt.	210	539.389	358.287	260.418	81.104	18.787	4.824	1.794
Los Angeles Int'l Arpt.	220	552.269	364.247	264.757	82.821	19.163	4.853	1.804

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{lb/hr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Los Angeles Int'l Arpt.	230	561.648	367.355	265.284	82.089	18.948	4.772	1.774
Los Angeles Int'l Arpt.	240	577.281	378.378	273.521	85.157	19.743	4.808	1.786
Los Angeles Int'l Arpt.	250	602.865	392.604	282.492	87.857	20.444	4.884	1.811
Los Angeles Int'l Arpt.	260	636.961	411.469	293.371	90.725	21.221	4.850	1.798
Los Angeles Int'l Arpt.	270	649.458	415.717	294.682	88.603	19.872	4.795	1.783
Los Angeles Int'l Arpt.	280	635.583	410.477	292.619	90.395	21.142	4.927	1.829
Los Angeles Int'l Arpt.	290	615.390	394.402	283.301	87.971	20.479	4.876	1.812
Los Angeles Int'l Arpt.	300	575.238	375.899	270.975	84.681	19.646	4.841	1.794
Los Angeles Int'l Arpt.	310	576.275	380.358	274.785	85.049	19.763	4.801	1.783
Los Angeles Int'l Arpt.	320	549.724	364.766	264.937	82.446	19.083	4.821	1.790
Los Angeles Int'l Arpt.	330	540.473	359.274	261.291	81.541	18.891	4.946	1.842
Los Angeles Int'l Arpt.	340	537.820	355.379	256.947	75.696	16.307	4.866	1.813
Los Angeles Int'l Arpt.	350	523.409	342.469	246.192	67.020	14.009	4.582	1.707
Los Angeles Int'l Arpt.	360	512.168	328.519	231.905	58.686	12.419	4.636	1.741
Mission Viejo	10	546.318	344.817	241.122	63.808	13.548	5.058	1.388
Mission Viejo	20	572.494	343.564	247.163	72.531	18.193	5.895	1.785
Mission Viejo	30	565.874	365.304	259.700	78.453	18.446	4.045	1.157
Mission Viejo	40	581.806	375.778	267.363	80.908	19.020	4.513	1.411
Mission Viejo	50	577.239	370.567	262.190	79.768	18.455	3.081	0.810
Mission Viejo	60	573.800	371.372	265.719	81.424	18.840	3.540	1.048
Mission Viejo	70	597.791	383.317	272.586	83.452	19.384	5.152	1.536
Mission Viejo	80	626.255	397.709	280.863	85.814	20.038	5.152	1.536
Mission Viejo	90	633.207	400.583	281.755	83.856	18.820	3.639	1.062
Mission Viejo	100	627.415	398.729	281.758	86.072	20.094	3.618	1.002
Mission Viejo	110	599.830	384.536	273.427	83.627	19.409	3.791	1.029
Mission Viejo	120	574.738	371.656	266.004	81.640	18.890	3.707	1.007
Mission Viejo	130	587.715	373.781	263.988	79.768	18.666	5.435	1.600
Mission Viejo	140	578.338	367.776	259.297	78.697	18.121	5.435	1.600
Mission Viejo	150	535.646	350.630	252.725	77.669	17.905	2.913	0.600
Mission Viejo	160	524.760	341.963	245.767	72.000	15.454	2.562	0.699
Mission Viejo	170	506.339	325.089	231.693	64.061	11.918	3.144	0.977
Mission Viejo	180	499.342	316.845	222.378	55.811	8.511	1.947	0.470
Mission Viejo	190	511.851	328.918	233.817	62.584	11.987	1.500	0.520
Mission Viejo	200	526.301	342.920	246.439	72.186	15.490	1.572	0.546
Mission Viejo	210	536.436	351.397	253.438	78.023	17.998	1.646	0.567

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{lb}/\text{hr}}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Mission Viejo	220	578.811	371.161	263.252	79.430	18.692	2.907	0.611
Mission Viejo	230	593.698	378.853	267.791	80.403	18.874	5.306	1.611
Mission Viejo	240	598.736	383.232	270.943	81.810	19.308	4.967	1.449
Mission Viejo	250	602.267	387.241	275.788	84.533	19.631	2.370	0.575
Mission Viejo	260	628.255	400.216	283.110	86.502	20.192	1.657	0.556
Mission Viejo	270	634.709	401.066	281.997	83.820	18.804	3.130	0.880
Mission Viejo	280	626.255	397.709	281.028	85.941	20.079	4.294	1.315
Mission Viejo	290	614.176	388.852	273.697	83.829	19.646	3.694	1.034
Mission Viejo	300	575.513	371.681	265.963	81.510	18.849	2.012	0.556
Mission Viejo	310	624.468	399.667	283.169	85.409	20.002	2.694	0.793
Mission Viejo	320	549.546	357.454	256.909	78.697	18.121	3.576	1.111
Mission Viejo	330	574.008	366.978	259.854	78.305	18.355	4.741	1.467
Mission Viejo	340	541.271	348.804	247.595	72.374	15.782	3.565	0.997
Mission Viejo	350	552.198	332.630	237.132	64.938	13.910	5.483	1.497
Mission Viejo	360	579.253	338.189	232.376	57.604	14.954	5.989	1.741
Ontario Arpt.	10	649.504	429.317	309.962	85.052	19.102	6.234	2.350
Ontario Arpt.	20	652.071	441.825	325.423	98.883	21.703	6.485	2.441
Ontario Arpt.	30	678.047	451.873	326.037	100.921	24.070	6.448	2.409
Ontario Arpt.	40	666.527	442.956	321.979	103.669	23.887	6.476	2.423
Ontario Arpt.	50	694.737	455.955	327.177	105.008	24.263	6.455	2.416
Ontario Arpt.	60	693.489	463.020	340.308	108.604	25.022	6.496	2.427
Ontario Arpt.	70	769.133	510.561	369.258	115.357	26.695	6.545	2.444
Ontario Arpt.	80	792.792	518.811	372.411	115.909	26.879	6.497	2.425
Ontario Arpt.	90	807.524	524.613	373.884	112.789	25.739	6.520	2.440
Ontario Arpt.	100	799.188	522.771	375.576	117.152	27.156	6.435	2.400
Ontario Arpt.	110	778.701	494.883	358.216	113.632	26.275	6.458	2.414
Ontario Arpt.	120	707.846	472.323	343.826	107.921	24.838	6.447	2.410
Ontario Arpt.	130	681.123	452.332	327.590	104.979	24.390	6.448	2.410
Ontario Arpt.	140	657.305	445.039	327.248	103.265	24.113	6.431	2.396
Ontario Arpt.	150	648.905	442.670	327.696	105.075	28.218	8.934	2.675
Ontario Arpt.	160	670.531	453.979	333.516	100.791	21.785	6.430	2.415
Ontario Arpt.	170	688.415	460.366	334.656	92.160	18.987	6.338	2.387
Ontario Arpt.	180	626.400	411.989	296.445	71.719	16.420	6.214	2.339
Ontario Arpt.	190	671.731	451.230	328.246	90.595	19.029	6.348	2.382
Ontario Arpt.	200	667.587	441.475	323.373	98.383	21.755	6.400	2.401

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{lb}/\text{hr}}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Ontario Arpt.	210	690.623	466.574	341.206	106.357	24.328	6.404	2.393
Ontario Arpt.	220	712.190	476.477	346.557	107.696	24.788	6.415	2.399
Ontario Arpt.	230	729.053	481.309	345.290	107.545	24.684	6.454	2.419
Ontario Arpt.	240	715.497	477.131	348.521	110.223	25.360	6.484	2.430
Ontario Arpt.	250	844.385	556.268	400.184	123.954	28.564	6.271	2.323
Ontario Arpt.	260	811.582	530.195	379.621	118.594	27.494	6.359	2.349
Ontario Arpt.	270	863.865	548.714	383.454	116.473	25.819	6.490	2.426
Ontario Arpt.	280	819.640	519.952	375.681	118.085	27.369	6.279	2.339
Ontario Arpt.	290	822.950	544.825	393.255	122.583	28.318	6.423	2.400
Ontario Arpt.	300	743.175	479.231	348.941	110.455	25.453	6.254	2.330
Ontario Arpt.	310	691.632	463.786	338.808	106.728	24.480	6.303	2.352
Ontario Arpt.	320	672.170	454.780	334.021	106.026	24.346	6.276	2.346
Ontario Arpt.	330	702.993	472.220	345.599	109.165	25.085	6.487	2.431
Ontario Arpt.	340	651.630	440.843	323.814	97.801	21.475	6.234	2.335
Ontario Arpt.	350	647.998	431.897	313.832	86.532	18.737	6.042	2.273
Ontario Arpt.	360	641.171	423.108	302.877	72.702	16.333	6.282	2.369
Palm Springs Arpt.	10	592.111	388.129	279.026	75.827	15.623	5.128	1.920
Palm Springs Arpt.	20	618.813	410.336	297.233	87.886	18.812	5.169	1.927
Palm Springs Arpt.	30	603.837	402.722	294.117	92.294	21.274	5.298	1.969
Palm Springs Arpt.	40	616.962	410.878	299.229	93.489	21.513	5.382	2.002
Palm Springs Arpt.	50	633.729	419.432	304.832	95.083	21.881	5.230	1.939
Palm Springs Arpt.	60	665.961	440.035	318.191	98.868	22.810	5.142	1.906
Palm Springs Arpt.	70	674.857	442.877	319.171	99.370	23.005	5.330	1.975
Palm Springs Arpt.	80	710.665	459.228	327.893	101.814	23.712	5.250	1.934
Palm Springs Arpt.	90	729.571	466.569	331.384	99.656	22.215	5.305	1.968
Palm Springs Arpt.	100	713.628	460.682	328.141	101.383	23.585	5.400	2.003
Palm Springs Arpt.	110	685.959	448.983	322.818	100.126	23.174	5.277	1.958
Palm Springs Arpt.	120	637.042	419.708	304.530	95.261	21.986	5.291	1.960
Palm Springs Arpt.	130	633.387	412.586	294.436	89.740	20.689	5.292	1.964
Palm Springs Arpt.	140	611.230	403.900	293.115	91.097	20.948	5.313	1.976
Palm Springs Arpt.	150	604.482	402.145	292.390	90.965	20.957	5.318	1.978
Palm Springs Arpt.	160	603.329	394.578	281.721	82.878	17.782	5.345	1.999
Palm Springs Arpt.	170	647.504	424.601	304.665	82.433	15.921	5.333	1.993
Palm Springs Arpt.	180	567.831	368.159	261.581	62.295	13.941	5.154	1.933
Palm Springs Arpt.	190	570.803	378.316	274.381	75.656	15.767	5.234	1.937

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{lb}/\text{hr}}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Palm Springs Arpt.	200	611.611	405.976	294.359	86.890	18.513	5.213	1.939
Palm Springs Arpt.	210	642.190	421.056	303.056	92.911	21.506	5.209	1.931
Palm Springs Arpt.	220	584.013	390.074	285.912	90.492	20.868	5.348	1.987
Palm Springs Arpt.	230	596.520	398.383	290.921	91.596	21.108	5.216	1.926
Palm Springs Arpt.	240	641.947	421.237	303.571	94.529	21.830	5.283	1.959
Palm Springs Arpt.	250	661.955	429.377	307.321	95.653	22.173	5.381	1.995
Palm Springs Arpt.	260	703.428	453.903	323.370	100.375	23.354	5.343	1.973
Palm Springs Arpt.	270	718.818	460.958	326.387	97.893	21.889	5.460	2.025
Palm Springs Arpt.	280	706.459	455.590	324.948	100.325	23.346	5.469	2.016
Palm Springs Arpt.	290	659.585	427.504	307.548	96.412	22.371	5.384	1.995
Palm Springs Arpt.	300	660.549	429.858	306.655	95.344	22.013	5.401	1.999
Palm Springs Arpt.	310	620.197	406.640	293.391	92.190	21.251	5.332	1.981
Palm Springs Arpt.	320	626.626	414.324	299.554	91.823	21.126	5.296	1.965
Palm Springs Arpt.	330	607.725	402.861	292.147	91.442	21.090	5.343	1.979
Palm Springs Arpt.	340	641.907	424.620	306.766	89.993	19.199	5.765	1.908
Palm Springs Arpt.	350	618.954	405.994	291.561	78.756	15.779	5.152	1.929
Palm Springs Arpt.	360	640.610	408.409	286.509	67.215	13.757	5.059	1.892
Perris	10	640.494	404.997	283.474	74.662	14.536	4.847	1.415
Perris	20	658.164	423.836	301.012	86.640	18.781	3.544	1.298
Perris	30	618.951	396.124	284.519	89.012	20.507	3.640	1.324
Perris	40	679.281	440.055	313.958	95.317	22.184	3.870	1.349
Perris	50	701.790	453.640	323.219	98.243	22.886	4.469	1.362
Perris	60	682.369	418.501	298.768	92.706	21.378	3.620	1.315
Perris	70	721.544	454.685	318.378	94.960	22.140	3.596	1.311
Perris	80	759.480	477.468	334.486	101.568	24.022	3.615	1.309
Perris	90	704.472	451.438	319.530	95.777	21.388	3.529	1.287
Perris	100	691.910	446.228	317.995	98.176	22.857	3.536	1.280
Perris	110	659.349	429.782	308.531	95.611	22.145	3.648	1.322
Perris	120	646.275	415.642	300.330	93.424	21.565	3.712	1.359
Perris	130	679.540	436.767	309.420	92.487	21.435	4.651	1.403
Perris	140	664.688	429.729	306.145	92.647	21.553	4.428	1.413
Perris	150	665.679	424.130	297.794	89.395	20.589	3.834	1.405
Perris	160	665.679	424.130	297.794	86.347	18.755	3.803	1.397
Perris	170	646.917	411.257	289.547	76.659	14.900	3.704	1.372
Perris	180	615.476	381.420	262.171	64.202	10.967	3.844	1.429

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{lb/hr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Perris	190	646.099	410.346	288.380	75.837	14.705	3.621	1.332
Perris	200	659.930	421.850	297.449	83.863	18.067	3.719	1.370
Perris	210	679.020	437.322	310.222	92.551	21.388	3.682	1.344
Perris	220	682.453	441.499	314.684	95.309	22.155	3.707	1.353
Perris	230	702.862	454.469	323.856	98.459	22.940	5.709	1.761
Perris	240	630.490	414.426	299.201	92.856	21.412	3.839	1.373
Perris	250	654.862	426.451	305.952	94.721	21.937	3.704	1.343
Perris	260	746.468	463.474	321.214	98.357	22.882	3.727	1.354
Perris	270	736.970	452.229	318.803	95.374	21.281	3.520	1.280
Perris	280	753.436	471.961	329.667	99.317	23.421	3.336	1.200
Perris	290	719.787	458.067	323.007	97.939	23.019	3.554	1.279
Perris	300	682.810	434.237	306.222	92.659	21.446	4.324	1.338
Perris	310	684.950	439.901	311.531	93.059	21.551	4.576	1.362
Perris	320	681.393	441.268	314.666	95.344	22.163	3.743	1.298
Perris	330	684.114	443.216	316.207	95.935	22.313	4.595	1.319
Perris	340	657.980	423.609	301.065	86.947	18.859	3.771	1.385
Perris	350	656.023	416.802	292.963	77.190	15.006	3.849	1.427
Perris	360	644.530	402.016	278.241	71.463	10.724	3.800	1.405
Pico Rivera	10	478.965	285.177	202.573	55.113	11.726	4.250	1.278
Pico Rivera	20	489.809	306.183	213.410	61.832	13.421	3.148	1.002
Pico Rivera	30	489.809	306.183	219.195	67.016	15.583	2.886	0.860
Pico Rivera	40	480.930	310.024	221.486	67.309	15.616	2.637	0.817
Pico Rivera	50	532.023	336.690	236.832	70.649	16.716	4.367	1.359
Pico Rivera	60	515.684	320.750	228.229	69.498	16.193	3.117	0.760
Pico Rivera	70	522.311	332.105	234.828	71.467	16.723	2.910	0.925
Pico Rivera	80	542.386	342.295	240.878	73.237	17.226	2.211	0.583
Pico Rivera	90	541.415	340.321	238.532	70.781	16.035	2.483	0.696
Pico Rivera	100	543.657	342.943	241.629	73.559	17.499	2.388	0.621
Pico Rivera	110	520.628	330.360	233.529	70.765	16.532	2.016	0.474
Pico Rivera	120	502.496	322.180	229.264	69.831	16.266	2.136	0.617
Pico Rivera	130	488.571	314.053	223.912	68.019	15.795	1.827	0.559
Pico Rivera	140	484.897	306.941	219.255	66.616	15.461	1.725	0.530
Pico Rivera	150	468.816	302.709	216.391	65.795	15.285	1.407	0.440
Pico Rivera	160	455.806	293.345	209.411	61.422	13.218	1.415	0.440
Pico Rivera	170	442.751	283.621	201.380	56.701	10.495	1.407	0.440

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{lb}/\text{hr}}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Pico Rivera	180	430.585	272.862	191.811	50.224	7.400	1.407	0.440
Pico Rivera	190	440.846	282.554	200.591	53.961	10.454	1.407	0.440
Pico Rivera	200	493.785	309.461	215.641	62.621	13.391	1.428	0.440
Pico Rivera	210	500.888	316.369	222.075	67.168	15.620	1.935	0.570
Pico Rivera	220	484.562	310.330	221.787	67.481	15.736	1.935	0.570
Pico Rivera	230	511.640	315.104	224.894	68.470	15.912	2.477	0.653
Pico Rivera	240	546.345	344.976	242.625	73.068	17.374	3.016	0.959
Pico Rivera	250	532.478	331.912	234.613	71.361	16.691	2.279	0.601
Pico Rivera	260	541.603	342.571	241.354	73.471	17.294	1.562	0.440
Pico Rivera	270	544.924	342.563	240.265	71.395	16.178	2.403	0.536
Pico Rivera	280	540.087	340.599	239.893	73.070	17.202	3.523	0.983
Pico Rivera	290	565.215	354.720	248.514	75.010	17.918	3.378	0.919
Pico Rivera	300	518.053	322.316	228.630	69.630	16.334	3.506	0.951
Pico Rivera	310	534.590	338.445	238.109	71.042	16.808	4.152	1.266
Pico Rivera	320	499.869	317.300	223.765	68.093	15.925	2.255	0.653
Pico Rivera	330	469.382	304.451	218.364	66.734	15.514	2.873	0.860
Pico Rivera	340	458.852	296.889	212.411	61.910	13.431	3.231	0.908
Pico Rivera	350	450.806	286.528	203.539	56.900	12.334	4.201	1.325
Pico Rivera	360	571.323	332.609	213.343	50.236	15.621	5.850	1.813
Redlands	10	576.613	376.579	270.751	73.544	13.947	4.128	1.474
Redlands	20	588.707	389.680	282.468	83.745	17.924	3.823	1.329
Redlands	30	633.441	416.761	299.889	91.025	20.882	4.467	1.648
Redlands	40	627.425	402.005	290.147	89.277	20.554	5.255	1.646
Redlands	50	642.785	422.245	302.740	91.891	21.146	4.698	1.724
Redlands	60	702.885	456.924	325.898	98.220	22.459	4.316	1.572
Redlands	70	662.181	431.540	309.641	95.781	22.158	4.843	1.787
Redlands	80	709.941	457.530	325.181	99.551	23.099	4.806	1.768
Redlands	90	735.347	469.947	331.745	98.622	21.960	4.767	1.765
Redlands	100	736.785	471.812	333.569	101.480	23.621	4.673	1.717
Redlands	110	680.453	436.071	312.778	96.804	22.414	4.635	1.704
Redlands	120	636.207	416.048	298.928	92.310	21.315	4.632	1.709
Redlands	130	617.736	408.070	295.555	91.784	21.142	4.085	1.439
Redlands	140	615.451	401.661	289.373	88.503	20.355	4.622	1.702
Redlands	150	602.479	397.398	288.809	89.783	20.671	4.214	1.371
Redlands	160	611.678	403.666	291.523	85.771	18.353	3.954	1.232

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{lb}/\text{hr}}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Redlands	170	579.258	377.362	270.291	73.093	13.907	4.482	1.670
Redlands	180	564.701	361.492	254.649	63.685	12.200	4.419	1.653
Redlands	190	568.385	373.163	268.840	73.247	14.183	5.149	1.698
Redlands	200	566.930	371.606	267.069	79.859	17.144	5.541	1.644
Redlands	210	606.104	404.772	294.310	91.452	21.119	4.867	1.746
Redlands	220	611.676	408.270	297.215	92.705	21.381	5.735	1.790
Redlands	230	621.010	409.257	295.831	91.478	21.052	4.624	1.710
Redlands	240	651.272	415.215	300.166	93.320	21.512	4.779	1.731
Redlands	250	652.837	417.081	299.160	93.337	21.641	5.190	1.713
Redlands	260	708.194	457.382	325.942	100.653	23.467	4.614	1.700
Redlands	270	716.497	457.051	324.107	97.390	21.744	5.477	1.673
Redlands	280	709.317	449.416	318.363	97.683	22.803	4.544	1.667
Redlands	290	678.989	433.692	311.235	96.565	22.351	4.447	1.629
Redlands	300	657.823	417.741	298.207	92.508	21.366	4.021	1.459
Redlands	310	632.875	416.380	299.982	92.691	21.323	3.052	1.048
Redlands	320	607.183	402.861	292.661	90.985	20.910	3.362	1.149
Redlands	330	596.310	395.093	286.617	89.245	20.546	4.200	1.541
Redlands	340	584.242	384.328	277.218	81.605	17.450	3.602	1.249
Redlands	350	614.221	383.305	269.975	73.641	14.090	3.996	1.483
Redlands	360	633.248	400.669	278.982	64.709	12.063	4.449	1.653
Riverside Arpt.	10	581.233	381.838	274.554	74.573	14.541	4.583	1.711
Riverside Arpt.	20	585.687	387.514	280.828	83.250	17.821	4.316	1.598
Riverside Arpt.	30	661.657	433.936	311.693	95.142	21.984	5.265	1.628
Riverside Arpt.	40	654.897	431.263	310.635	95.317	22.030	4.748	1.755
Riverside Arpt.	50	688.876	454.024	327.394	100.737	23.171	4.864	1.803
Riverside Arpt.	60	698.454	453.881	323.672	97.547	22.317	4.901	1.678
Riverside Arpt.	70	673.005	437.533	311.569	95.258	22.082	6.079	1.764
Riverside Arpt.	80	711.703	457.234	324.501	99.179	23.042	4.875	1.797
Riverside Arpt.	90	731.616	467.406	329.901	98.066	21.844	4.872	1.805
Riverside Arpt.	100	738.288	472.739	334.215	101.672	23.659	4.787	1.767
Riverside Arpt.	110	671.009	433.950	311.679	96.658	22.405	5.422	1.787
Riverside Arpt.	120	650.172	418.086	301.254	93.528	21.583	4.602	1.697
Riverside Arpt.	130	629.644	406.347	293.623	91.142	21.000	4.451	1.635
Riverside Arpt.	140	626.504	401.572	290.373	90.606	20.832	4.801	1.680
Riverside Arpt.	150	646.144	420.770	299.947	89.797	20.596	4.704	1.739

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{lb}/\text{hr}}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Riverside Arpt.	160	605.754	399.189	288.063	84.672	18.134	4.629	1.721
Riverside Arpt.	170	577.305	376.045	269.477	73.305	13.914	4.446	1.653
Riverside Arpt.	180	561.432	359.273	253.038	63.325	12.355	4.547	1.689
Riverside Arpt.	190	575.815	375.347	268.922	72.883	14.292	4.686	1.740
Riverside Arpt.	200	614.044	404.482	291.184	85.340	18.383	4.848	1.776
Riverside Arpt.	210	602.938	402.443	292.525	90.860	20.988	4.722	1.746
Riverside Arpt.	220	609.336	406.498	295.835	92.234	21.275	4.724	1.746
Riverside Arpt.	230	629.513	416.009	300.642	92.552	21.251	4.722	1.746
Riverside Arpt.	240	632.878	415.288	299.832	93.037	21.470	4.767	1.762
Riverside Arpt.	250	674.205	440.760	316.849	98.398	22.801	4.724	1.744
Riverside Arpt.	260	754.931	481.116	338.511	101.773	23.588	4.711	1.727
Riverside Arpt.	270	730.748	466.353	327.994	98.285	22.074	4.802	1.780
Riverside Arpt.	280	734.225	473.488	336.095	103.101	24.066	4.612	1.694
Riverside Arpt.	290	692.212	448.422	318.948	96.482	22.229	4.723	1.739
Riverside Arpt.	300	734.082	474.512	337.028	101.127	23.204	4.722	1.745
Riverside Arpt.	310	686.085	450.346	325.216	100.316	23.142	4.703	1.738
Riverside Arpt.	320	608.193	401.391	290.779	90.358	20.771	4.753	1.759
Riverside Arpt.	330	656.550	434.385	314.721	97.188	22.321	4.517	1.667
Riverside Arpt.	340	615.341	391.241	280.852	83.465	17.853	4.433	1.641
Riverside Arpt.	350	576.745	376.403	269.922	73.043	14.358	4.938	1.846
Riverside Arpt.	360	584.631	366.613	256.632	64.432	12.127	4.467	1.660
Santa Monica Arpt.	10	513.453	321.659	229.388	61.802	11.916	3.066	1.128
Santa Monica Arpt.	20	515.244	335.646	240.491	69.811	15.085	3.669	1.138
Santa Monica Arpt.	30	515.292	336.137	241.940	74.927	17.372	3.235	1.181
Santa Monica Arpt.	40	528.389	345.063	248.325	76.272	17.667	3.943	1.180
Santa Monica Arpt.	50	539.651	351.089	251.917	77.178	17.889	3.545	1.181
Santa Monica Arpt.	60	555.259	359.488	257.125	78.790	18.300	4.377	1.310
Santa Monica Arpt.	70	577.798	370.847	264.510	81.248	18.942	3.412	1.164
Santa Monica Arpt.	80	639.846	408.589	288.547	88.304	20.869	3.180	1.150
Santa Monica Arpt.	90	632.742	396.929	277.366	81.623	18.411	3.944	1.115
Santa Monica Arpt.	100	614.499	391.470	276.603	84.249	19.719	3.039	1.105
Santa Monica Arpt.	110	585.384	377.222	268.815	82.478	19.227	3.078	1.115
Santa Monica Arpt.	120	588.200	381.315	272.587	83.442	19.405	2.935	1.060
Santa Monica Arpt.	130	540.228	353.099	253.351	77.427	18.012	3.113	1.132
Santa Monica Arpt.	140	558.320	364.914	261.977	80.061	18.615	2.923	1.056

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{lb}/\text{hr}}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Santa Monica Arpt.	150	539.842	354.577	255.352	78.365	18.228	3.235	1.180
Santa Monica Arpt.	160	540.485	350.663	250.283	72.129	15.542	3.063	1.122
Santa Monica Arpt.	170	516.809	331.685	234.453	62.883	12.164	3.042	1.121
Santa Monica Arpt.	180	504.542	320.143	224.433	56.366	9.113	3.100	1.147
Santa Monica Arpt.	190	512.408	331.917	236.960	63.902	12.320	3.073	1.110
Santa Monica Arpt.	200	508.222	331.679	238.433	69.892	15.089	3.160	1.156
Santa Monica Arpt.	210	540.629	350.288	251.636	76.800	17.822	3.105	1.129
Santa Monica Arpt.	220	547.961	358.307	257.049	78.270	18.160	3.084	1.124
Santa Monica Arpt.	230	599.969	387.745	276.199	83.520	19.384	3.077	1.120
Santa Monica Arpt.	240	557.751	361.651	259.182	79.648	18.488	2.988	1.078
Santa Monica Arpt.	250	573.624	367.906	262.373	80.723	18.833	3.081	1.116
Santa Monica Arpt.	260	602.666	384.114	271.749	83.215	19.544	3.168	1.149
Santa Monica Arpt.	270	607.503	385.793	271.794	81.078	18.240	3.108	1.132
Santa Monica Arpt.	280	604.616	384.744	271.964	83.126	19.493	3.145	1.139
Santa Monica Arpt.	290	607.704	388.857	275.558	83.843	19.558	3.205	1.162
Santa Monica Arpt.	300	551.207	357.441	255.959	78.577	18.249	3.753	1.121
Santa Monica Arpt.	310	537.824	347.600	249.702	76.838	17.789	3.127	1.135
Santa Monica Arpt.	320	527.903	343.266	246.138	74.961	17.335	2.992	1.084
Santa Monica Arpt.	330	521.972	336.759	240.162	73.850	17.125	4.306	1.148
Santa Monica Arpt.	340	505.633	330.271	237.573	69.887	15.085	3.315	1.095
Santa Monica Arpt.	350	494.878	319.054	227.175	60.912	11.723	2.929	1.075
Santa Monica Arpt.	360	513.453	321.659	222.704	56.436	9.196	3.079	1.139
Upland	10	555.373	345.876	239.980	63.174	12.070	2.793	0.750
Upland	20	555.373	345.876	245.990	71.955	15.439	2.554	0.674
Upland	30	538.038	349.286	251.434	77.169	17.789	3.822	1.069
Upland	40	550.750	358.150	257.230	78.714	18.122	3.028	0.915
Upland	50	561.055	364.068	261.063	79.916	18.425	3.495	0.954
Upland	60	611.698	386.244	271.072	81.271	18.947	4.127	1.261
Upland	70	598.834	383.543	272.526	83.246	19.321	3.901	1.164
Upland	80	626.468	397.965	281.130	85.801	20.033	3.624	0.978
Upland	90	645.363	401.670	282.193	83.845	18.833	3.848	1.183
Upland	100	627.698	398.667	281.537	85.816	20.024	3.728	1.053
Upland	110	607.091	383.543	272.526	83.246	19.321	3.950	1.212
Upland	120	597.761	380.200	268.225	81.414	19.134	3.836	0.999
Upland	130	562.165	364.808	261.616	80.103	18.472	3.203	0.874

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{lb/hr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Upland	140	553.217	357.852	257.001	78.637	18.104	2.558	0.714
Upland	150	574.559	364.124	256.266	78.343	18.070	2.394	0.714
Upland	160	552.555	355.209	252.039	72.840	16.058	3.199	0.684
Upland	170	532.439	337.016	237.260	64.983	14.553	5.052	1.475
Upland	180	554.323	341.406	234.907	58.933	10.880	4.156	1.063
Upland	190	546.571	342.042	238.299	63.932	12.307	2.771	0.812
Upland	200	572.130	353.008	247.315	72.389	15.533	4.951	1.463
Upland	210	608.407	387.571	273.800	81.780	19.093	4.951	1.463
Upland	220	552.614	357.603	256.809	78.572	18.090	2.576	0.770
Upland	230	561.542	364.421	261.334	80.007	18.446	2.120	0.596
Upland	240	576.691	372.635	266.372	81.561	18.857	3.009	0.817
Upland	250	622.700	390.231	272.968	82.243	19.365	3.009	0.817
Upland	260	622.159	394.920	278.858	85.058	19.862	2.872	0.832
Upland	270	652.561	402.430	280.564	83.325	18.739	2.608	0.719
Upland	280	622.953	394.720	278.198	84.657	19.756	1.892	0.484
Upland	290	587.508	373.630	265.074	80.913	18.804	1.942	0.560
Upland	300	570.809	368.203	262.872	80.275	18.549	1.680	0.462
Upland	310	589.492	374.574	263.399	77.861	18.191	2.048	0.635
Upland	320	614.264	391.550	276.708	82.720	19.302	3.078	0.978
Upland	330	577.430	356.281	250.972	76.828	17.700	2.876	0.810
Upland	340	512.649	333.122	238.925	69.750	14.983	1.701	0.462
Upland	350	516.291	331.570	235.612	63.320	12.060	1.476	0.462
Upland	360	492.585	311.580	218.245	56.352	8.367	2.268	0.595
USC/Downtown L.A.	10	555.030	358.365	254.880	68.522	13.060	3.593	0.938
USC/Downtown L.A.	20	562.801	368.086	264.743	77.494	16.603	2.991	0.700
USC/Downtown L.A.	30	592.076	387.124	278.295	85.022	19.559	2.440	0.656
USC/Downtown L.A.	40	602.648	393.365	282.960	86.681	19.938	2.976	0.746
USC/Downtown L.A.	50	614.124	399.781	286.461	87.395	20.132	4.794	1.304
USC/Downtown L.A.	60	631.676	408.685	292.512	89.748	20.723	3.708	1.082
USC/Downtown L.A.	70	657.404	421.964	299.537	91.465	21.217	3.962	1.230
USC/Downtown L.A.	80	675.915	429.241	303.600	92.951	21.713	3.721	1.090
USC/Downtown L.A.	90	687.531	435.333	306.198	91.214	20.482	3.345	0.937
USC/Downtown L.A.	100	683.125	434.911	306.890	93.513	21.845	2.690	0.798
USC/Downtown L.A.	110	653.006	417.949	297.275	90.856	21.058	2.766	0.833
USC/Downtown L.A.	120	632.879	408.930	291.561	88.740	20.492	2.924	0.803

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{lb/hr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
USC/Downtown L.A.	130	606.811	395.355	283.751	86.863	20.006	3.122	0.892
USC/Downtown L.A.	140	602.738	393.235	282.629	86.448	19.873	1.721	0.475
USC/Downtown L.A.	150	589.748	385.841	277.525	84.919	19.547	1.464	0.473
USC/Downtown L.A.	160	575.464	374.176	267.923	77.890	16.698	1.821	0.555
USC/Downtown L.A.	170	558.237	359.730	255.783	68.331	13.047	2.013	0.531
USC/Downtown L.A.	180	542.473	343.367	240.155	62.497	9.174	1.732	0.453
USC/Downtown L.A.	190	557.701	360.758	257.299	69.138	13.182	1.481	0.449
USC/Downtown L.A.	200	574.258	373.296	267.214	77.711	16.661	1.374	0.451
USC/Downtown L.A.	210	585.007	383.088	275.740	84.405	19.407	1.665	0.465
USC/Downtown L.A.	220	587.948	384.194	276.152	84.437	19.437	2.723	0.784
USC/Downtown L.A.	230	591.821	385.746	276.694	84.365	19.385	2.723	0.784
USC/Downtown L.A.	240	618.542	400.640	286.224	87.507	20.188	2.498	0.752
USC/Downtown L.A.	250	652.415	418.877	297.483	90.746	21.048	2.301	0.655
USC/Downtown L.A.	260	652.146	418.631	296.528	90.887	21.310	2.084	0.596
USC/Downtown L.A.	270	678.838	427.251	299.018	88.006	19.699	1.586	0.464
USC/Downtown L.A.	280	667.871	425.785	300.762	91.753	21.420	1.885	0.558
USC/Downtown L.A.	290	656.229	420.935	298.632	90.895	21.080	1.879	0.472
USC/Downtown L.A.	300	633.849	409.623	292.127	89.482	20.648	2.010	0.528
USC/Downtown L.A.	310	612.292	399.690	287.244	88.112	20.285	4.585	1.199
USC/Downtown L.A.	320	575.652	376.567	271.420	83.393	19.225	5.297	1.506
USC/Downtown L.A.	330	590.769	385.805	277.025	84.493	19.458	3.155	0.856
USC/Downtown L.A.	340	573.616	373.199	267.953	78.074	16.692	3.016	0.798
USC/Downtown L.A.	350	560.344	359.733	254.478	71.575	13.003	2.831	0.804
USC/Downtown L.A.	360	532.392	340.413	239.858	62.506	9.002	2.728	0.604
Van Nuys Arpt.	10	558.302	365.479	264.072	72.342	13.756	4.517	1.685
Van Nuys Arpt.	20	592.389	392.286	283.480	83.593	18.035	4.551	1.697
Van Nuys Arpt.	30	597.720	384.318	280.689	88.215	20.383	4.461	1.652
Van Nuys Arpt.	40	658.752	436.741	315.843	97.024	22.288	4.485	1.663
Van Nuys Arpt.	50	614.608	399.740	288.973	90.061	20.797	4.464	1.652
Van Nuys Arpt.	60	626.171	411.689	297.042	92.188	21.349	4.629	1.676
Van Nuys Arpt.	70	725.166	472.205	337.669	104.025	24.173	4.582	1.692
Van Nuys Arpt.	80	731.068	463.729	325.032	100.088	23.486	4.589	1.687
Van Nuys Arpt.	90	706.819	455.542	323.352	97.210	21.747	4.597	1.706
Van Nuys Arpt.	100	683.826	442.860	316.402	98.507	23.039	4.662	1.726
Van Nuys Arpt.	110	652.865	429.447	308.992	96.072	22.419	4.650	1.720

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu\text{g}/\text{m}^3}{\text{lb}/\text{hr}}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Van Nuys Arpt.	120	622.516	412.135	297.765	92.985	21.521	4.659	1.724
Van Nuys Arpt.	130	616.357	406.555	292.462	90.401	20.877	4.583	1.699
Van Nuys Arpt.	140	632.597	415.919	299.022	92.257	21.280	4.514	1.669
Van Nuys Arpt.	150	637.603	420.278	302.227	91.647	21.047	4.516	1.664
Van Nuys Arpt.	160	605.417	403.244	292.414	86.598	18.637	4.569	1.702
Van Nuys Arpt.	170	564.595	371.010	267.227	72.893	13.888	4.488	1.672
Van Nuys Arpt.	180	601.593	378.819	262.689	61.024	11.975	4.535	1.701
Van Nuys Arpt.	190	601.593	378.819	262.689	71.059	13.643	4.482	1.668
Van Nuys Arpt.	200	552.865	362.991	263.745	78.847	16.950	4.433	1.650
Van Nuys Arpt.	210	567.556	376.987	274.109	85.194	19.692	4.482	1.662
Van Nuys Arpt.	220	595.902	395.564	287.344	89.335	20.581	4.467	1.645
Van Nuys Arpt.	230	592.632	390.765	283.514	88.957	20.534	4.610	1.711
Van Nuys Arpt.	240	633.214	414.703	299.160	93.212	21.555	4.626	1.709
Van Nuys Arpt.	250	639.235	415.988	297.654	93.230	21.646	4.434	1.638
Van Nuys Arpt.	260	680.823	441.840	315.877	97.901	22.829	4.589	1.689
Van Nuys Arpt.	270	684.276	442.358	314.657	94.888	21.199	4.567	1.693
Van Nuys Arpt.	280	671.009	435.283	311.742	96.907	22.588	4.645	1.720
Van Nuys Arpt.	290	650.303	424.821	305.275	94.676	21.944	4.642	1.720
Van Nuys Arpt.	300	619.218	409.041	296.153	92.337	21.351	4.641	1.722
Van Nuys Arpt.	310	607.361	400.941	290.100	89.883	20.742	4.644	1.724
Van Nuys Arpt.	320	613.330	409.890	298.947	93.583	21.574	4.589	1.702
Van Nuys Arpt.	330	581.125	388.721	283.205	88.614	20.500	4.609	1.712
Van Nuys Arpt.	340	572.079	374.397	271.579	81.056	17.381	5.158	1.678
Van Nuys Arpt.	350	558.115	364.863	262.802	72.374	13.764	4.664	1.741
Van Nuys Arpt.	360	546.746	353.689	249.904	60.581	11.944	4.526	1.692

ATTACHMENT 3



South Coast Air Quality Management District

**AB 2588 and Rule 1402 Supplemental Guidelines
(Supplemental Guidelines for Preparing Risk
Assessments for the Air Toxics “Hot Spots”
Information and Assessment Act)**

July 2018

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1. INTRODUCTION

These Supplemental Guidelines are to be used in conjunction with the document prepared by the State of California Office of Environmental Health Hazard Assessment (OEHHA) entitled “Air Toxics Hot Spots Program Guidance Manual for the Preparation of Risk Assessments” (referred to hereafter as the 2015 OEHHA HRA Guidelines).¹ Facilities required to submit health risk assessments to the South Coast Air Quality Management District (SCAQMD) must follow the 2015 OEHHA HRA Guidelines pursuant to Health and Safety Code 44360(b)(2). Since the 2015 OEHHA HRA Guidelines defer to the local air district for specific, localized, or additional requirements, these Supplemental Guidelines address those areas and other issues that have arisen during the implementation of the AB 2588 Program at SCAQMD.

A certification form must be submitted to SCAQMD with all documents and correspondence relating to health risk assessments.²

Please visit SCAQMD’s AB 2588 Program webpage provided below for additional information, documents, and any questions regarding this document, health risk assessment methodology, and other AB 2588 Program issues.³ Questions may be emailed to AB2588@aqmd.gov or asked via phone at (909) 396-3610.

¹<https://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0>

²<http://www.aqmd.gov/home/rules-compliance/compliance/toxic-hot-spots-ab-2588/forms>

³<http://www.aqmd.gov/home/rules-compliance/compliance/toxic-hot-spots-ab-2588>

2. OVERVIEW OF THE AB 2588 PROGRAM

In 1987, the California legislature adopted the Air Toxics "Hot Spots" Information and Assessment Act; also known as Assembly Bill 2588 (AB 2588). The goals of the AB 2588 Program are to collect toxic air contaminant emissions data, identify facilities having localized impacts, determine health risks, and notify affected individuals. In 1992, the California legislature added a risk reduction component, the Facility Air Toxic Contaminant Risk Audit and Reduction Plan, or Senate Bill 1731 (SB 1731), which requires facilities to develop and implement measures to reduce impacts if risks are found above thresholds specified by air districts. *SCAQMD Rule 1402 - Control of Toxic Air Contaminants from Existing Sources* implements various aspects of AB 2588 and SB 1731 including public notification and risk reduction requirements for facilities with health risks that are above specified thresholds.

Rule 1402 was amended in October 7, 2016 to include a provision to allow facilities to participate in a Voluntary Risk Reduction Program. This program is an alternative to complying with the traditional AB 2588 Program and Rule 1402 approach that provides qualifying facilities an opportunity to reduce health risks below the Notification Risk Level through a Voluntary Risk Reduction Plan (VRRP) and employ a Modified Public Notification approach as specified in Rule 1402. The Voluntary Risk Reduction Program will achieve risk reductions both sooner and beyond what is required in the traditional AB 2588, SB 1731, and Rule 1402 process.

There are five important components to the AB 2588 program as follows:

- *Emissions Reporting* - Facilities subject to the AB 2588 Program submit an air toxics inventory every four years through SCAQMD's Annual Emissions Reporting (AER) Program. Facilities are allowed to simplify AER reporting by aggregating common sources.
- *Prioritization* - From the simplified reported toxic emissions submitted through AER, SCAQMD staff prioritizes facilities, using a procedure approved by the Governing Board, into three categories: high, intermediate, and low priority. High priority facilities are then asked to prepare an Air Toxics Inventory Report (ATIR). In contrast to the simplified reporting allowed under AER, the ATIR requires greater detail which includes process, device, and stack information for each piece of equipment.
- *Health Risk Assessment* - From the detailed reported toxic emissions submitted through the ATIR, high priority facilities must prepare a Health Risk Assessment (HRA).
- *Public Notice* - If the health risks reported in the HRA exceed specified public notification thresholds, then the facility is required to provide public notice to the affected community.
- *Risk Reduction* - If the health risks reported in the HRA exceed specified action risk levels in Rule 1402, then the facility is required to reduce their health risks below the action risk levels.

Figure 1 below provides an overview of the AB 2588 Program and the different paths a facility may follow under Rule 1402.

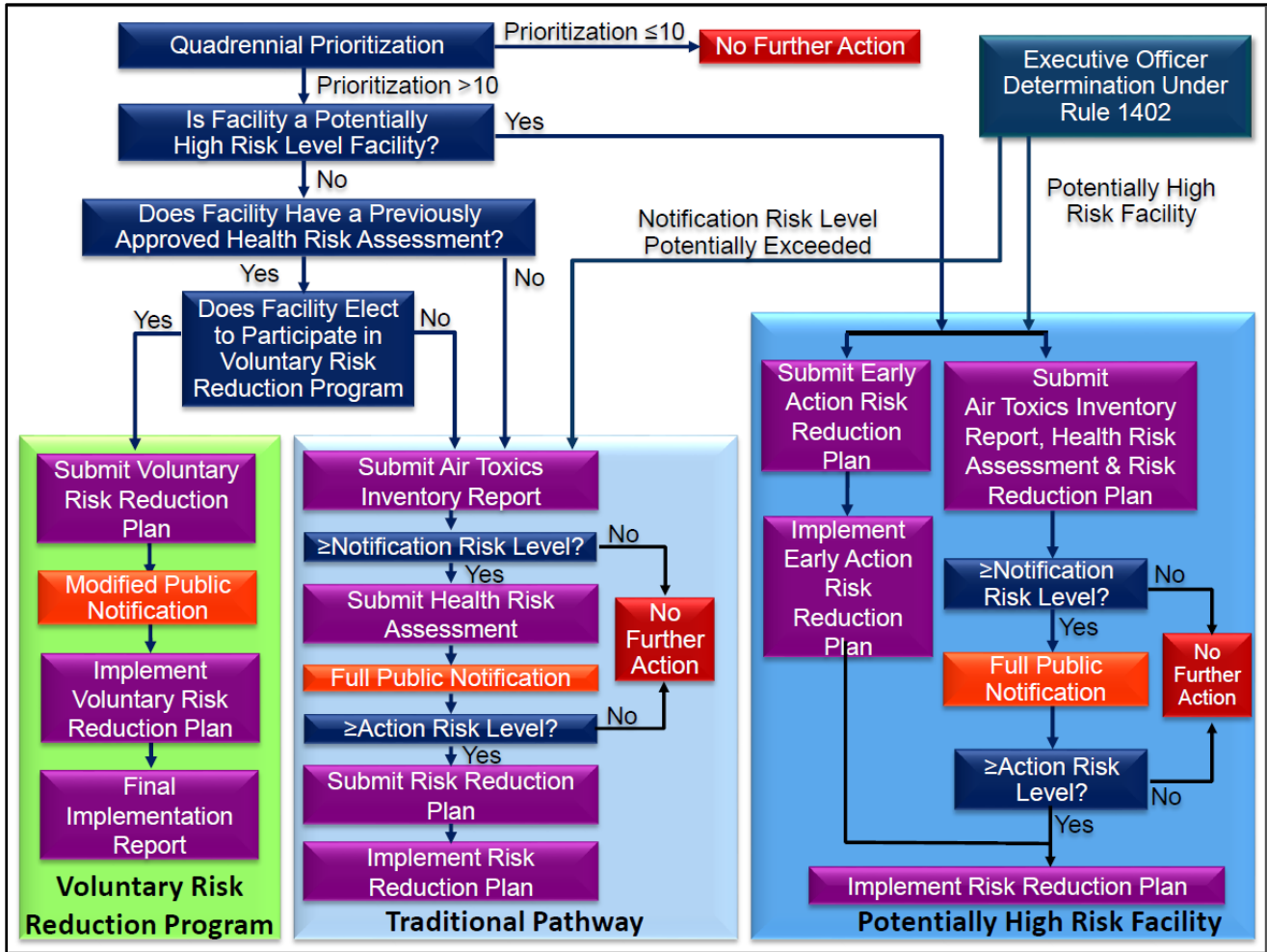


Figure 1. Overview of the AB 2588 Program and illustration of the paths by which a facility may follow

3. SUPPLEMENTAL GUIDELINES

3.1 Air Toxics Emissions Reporting

SCAQMD's AER Program is used for:

- All facilities subject to AER, including AB 2588 facilities who report their annual emissions of criteria pollutants and any one of 24 toxic air contaminants and ozone depleting compounds (ODC) (shown in Table 1 below). The report comprises the annual emissions report for toxic air contaminants.
- AB 2588 facilities which are subject to quadrennial (once in four years) reporting requirements. These facilities report any one of approximately 177 toxic air contaminants and ODCs from a detailed list of substances in Table A-1 of *Reporting Procedures for AB 2588 Facilities for Reporting their Quadrennial Air Toxics Emissions Inventory*.⁴ This report comprises the quadrennial emissions report for toxic air contaminants.

Facilities subject to the AER Program calculate and report their emissions based on their throughput data (e.g., fuel usage, material usage, etc.), appropriate emission factors, and control efficiency, if applicable. The method for reporting emissions is described on SCAQMD's website.⁵

Table 1. Annually Reported Toxic Air Contaminants and ODCs under the AER Program

Ammonia	Chlorinated dioxins and dibenzofurans	Lead
Asbestos	Chlorofluorocarbons	Methylene chloride
Arsenic (inorganic)	1,4-Dioxane	Nickel
Benzene	Ethylene dibromide	Perchloroethylene
Beryllium	Ethylene dichloride	Polynuclear aromatic hydrocarbons (PAH)
1,3-Butadiene	Ethylene oxide	1,1,1-Trichloroethane
Cadmium	Formaldehyde	Trichloroethylene
Carbon tetrachloride	Hexavalent chromium	Vinyl chloride

The data collected in the AER Program in addition to information from other sources (i.e. monitoring data, source specific information, etc...) are used to determine potential candidates for the AB 2588 Program. Facilities that meet one of the following AB 2588 Program qualification conditions are required to prepare and submit a quadrennial air toxics inventory if:

- They emit 10 tons per year or more of VOC, NO_x, SO_x, or PM;
- They emit 25 tons per year or more of a combination of VOC, NO_x, SO_x, and PM;
- They emit less than 10 tons per year of VOC, NO_x, SO_x, or PM, but the facility activity is listed in California Air Resources Board's (CARB) Emission Inventory Criteria and Guidelines for the Air Toxics "Hot Spots" Program⁶;
- Their emissions exceed one or more of the reporting thresholds in Table I or II in *Rule*

⁴ http://www.aqmd.gov/docs/default-source/planning/risk-assessment/quadrennial_atir_procedure.pdf

⁵ <http://www.aqmd.gov/home/rules-compliance/compliance/annual-emission-reporting>

⁶ <http://www.arb.ca.gov/ab2588/2588guid.htm>

*1402 – Control of Toxic Air Contaminants From Existing Sources;*⁷ or

- The Executive Officer of SCAQMD determines that emissions levels from the facility have the potential to cause an exceedance of risk reduction thresholds.

Facilities subject to the AB 2588 Program must provide a quadrennial report for toxic air contaminants. These substances are listed in Table A-1 of *Reporting Procedures for AB 2588 Facilities for Reporting their Quadrennial Air Toxics Emissions Inventory*, which provides the substance names and associated Chemical Abstracts Service (CAS) numbers. The degree of accuracy is also provided for each substance. The degree of accuracy is a de minimis emission level for reporting. As a result, facility-wide emissions of the substance which are greater than one-half of their corresponding degree of accuracy must be inventoried and reported.

As part of the quadrennial report for toxic air contaminants, facilities must also provide the distances to the nearest residential and commercial receptors, and the facility operating schedule (e.g., operating hours per day, operating days per week, and operating weeks per year). It is critical that facilities estimate their toxic emissions as precisely and accurately as possible. These reported emissions are used to prioritize the facility as discussed in the next section, 3.2. Prioritization Procedure. A facility's prioritization score determines its fees and if it is necessary to prepare an ATIR or VRRP (if eligible).

An ATIR should be prepared by using the latest approved version of CARB's Hotspots Analysis and Reporting Program (HARP).⁸ In contrast to the simplified reporting allowed under AER, an ATIR requires a larger list of compounds (approximately 450 toxic air contaminants) and greater detail including process, device, and stack information for each piece of equipment.

When a facility is notified to prepare an ATIR or VRRP, the quadrennial toxic air contaminants emissions report is used as the 'base year emissions inventory.' This same base year emissions inventory is also used to prepare an HRA, Public Notice, and Risk Reduction Plan (RRP).

3.2. Prioritization Procedure

The AB 2588 Program requires SCAQMD staff to designate each facility as either high, intermediate, or low priority based on its individual priority score.

Per the requirements of the AB 2588 Program, SCAQMD's Prioritization Procedure considers the potency, toxicity, and quantity of hazardous materials released from the facility; the proximity of the facility to potential receptors, including, but not limited to, hospitals, schools, daycare centers, worksites, and residences; and any other factors that SCAQMD uses to determine that the facility may pose a significant risk to receptors. SCAQMD's Prioritization Procedure also includes adjustment factors for exposure period, averaging times, and the treatment of multipathway pollutants. The Prioritization Procedure is available at SCAQMD's website.⁹

A facility receives two scores: one for carcinogenic effects and the other for non-carcinogenic effects. The facility is then ranked using the higher of the two scores. Three categories are used in

⁷ <http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1402.pdf>

⁸ <http://www.arb.ca.gov/toxics/harp/harp.htm>

⁹ <http://www.aqmd.gov/home/rules-compliance/compliance/toxic-hot-spots-ab-2588/prioritization>

the ranking: high priority, intermediate priority, and low priority. Facilities designated as high priority are notified by SCAQMD staff of their priority score, required to submit a comprehensive inventory of their air toxic emissions via an ATIR, and required to submit a quadrennial emissions report using the AER software. Facilities ranked as intermediate priority are considered to be “District Tracking” facilities, which are required to submit an air toxics inventory once every four years, using the AER software. Facilities ranked as low priority are exempt from quadrennial emissions reporting. Priority scores are re-calculated each time a facility updates its quadrennial air toxic emission inventory. Table 2 summarizes the priority score categories and the actions required by each category.

Table 2. Priority Score Categories

Category	Facility Priority Score (PS)	Actions
High Priority	$PS > 10$	Prepare ATIR; update emissions quadrennially through AER
Intermediate Priority	$1 < PS \leq 10$	Update emissions quadrennially through AER
Low Priority	$PS \leq 1$	Exempt from quadrennial emissions reporting

SCAQMD staff considers requests from High Priority facilities to be re-prioritized after errors or other problems with their quadrennial emissions inventory report. Once the corrections are verified by SCAQMD staff, the facility will be informed, in writing. The following sections discuss the criteria used for evaluating requests to reprioritize a facility.

3.2.1. Receptor Distance

One of the factors considered when prioritizing facilities is the receptor distance. All facilities must report the distances to the nearest residential and commercial receptors as part of their AER submittal. If receptor distances are not provided, then default values (conservative receptor distances) are used by SCAQMD staff to prioritize that facility. If a facility operator believes that their facility was incorrectly categorized due to an incorrect or default receptor distance, then the facility must prepare and submit a signed copy of the Receptor Proximity Form which can be downloaded from the SCAQMD’s website.¹⁰

3.2.2. Computational Errors

If computational errors or conservative assumptions were made in the quadrennial emissions report for toxic air contaminants inventory that overestimated emissions and resulted in a High Priority classification, the facility may correct the errors and submit the corrected estimates and supporting documentation to AB 2588 Program staff. The facility must include in their submission the nature of the error and calculations showing how the original emission estimate was determined and how the correction changes this value.

Please note that SCAQMD staff must use process rates and emissions from the quadrennial emissions reporting year to prioritize a facility. Changes in emissions estimates due to changes in

¹⁰ <http://www.aqmd.gov/home/rules-compliance/compliance/toxic-hot-spots-ab-2588/forms>

process rates in years other than the quadrennial emissions reporting year cannot be used to re-categorize a facility. See section 3.3.2 for further details.

3.2.3 New Source Test Results

If new source test results are available and have been previously submitted to and approved by SCAQMD, then the approved source test results may be used with the process rates in the quadrennial emissions inventory report to recalculate emissions and the priority score of a facility.

3.2.4. Equipment/Process Shutdowns or Process Modifications

If equipment or processes with air toxic emissions have been shut down prior to High Priority classification and the permits have been surrendered, then these emission reductions may be used to recalculate the priority score of High Priority facilities. Evidence for these emission reductions must include copies of letters sent to SCAQMD requesting emission reduction credits and/or the surrender of SCAQMD permits.

If a process has been modified since the quadrennial emissions report and the equipment or process emits a different quantity of a toxic substance, and the facility has applied for and received a permit modification reflecting this change, then the emission reduction for that substance may be used to recalculate the priority score.

All supporting documentation regarding equipment shutdowns and process modifications must be received by AB 2588 Program staff in order to recalculate the priority score.

3.2.5. Facility Closures

If the entire facility is closed prior to High Priority classification or if a facility is scheduled for complete closure, this information must be reported to AB 2588 Program staff. Upon review, staff will make a decision whether the facility should submit an ATIR. Factors that must be considered include the status of permits granted to the facility by SCAQMD and the nature of any ongoing activities at the facility. Unless a facility is informed by staff in writing that an ATIR is no longer required, the facility operator must submit an ATIR by the date required.

3.2.6. Change of Ownership/Operator

If there has been a change in ownership or operator, the new owner/operator must submit the requested reports unless the facility no longer emits any substances required to be reported under AB 2588. In such case, the new facility owner/operator must provide SCAQMD staff the necessary documentation to be exempt from reporting requirements of the AB 2588 Program.

3.3. Emission Estimates Approved for Use in HRAs

Facilities subject to the submittal of HRAs under the AB 2588 Program must estimate and submit their ATIR using the latest approved version of HARP.¹¹ This ATIR should include, at a minimum, the elements outlined in Appendix A of these Supplemental Guidelines. OEHHA has grouped the substances to be reported into three groups as shown in Appendix A of the 2015 OEHHA HRA Guidelines.¹² There are distinct reporting requirements for the three groups as follows:

Appendix A-I Substances – All emissions of these substances must be quantified in the ATIR and HRA including those calculated in the ATIR as below the degree of accuracy or below detection limits.

Appendix A-II Substances – Emissions of these substances do not need to be quantified in the ATIR and HRA; however, facilities must report whether the substances are used, produced, or otherwise present on-site. These substances can be simply listed in a table in the HRA.

Appendix A-III Substances – These substances only need to be reported in a table in the ATIR and HRA if they are manufactured by the facility.

The intent of the AB 2588 Program is that facilities performing HRAs use the process rates and emissions data submitted in their quadrennial emissions inventory report (see Section 3.1). SCAQMD receives requests from facilities to use process rates and emissions data other than those reported in their quadrennial emissions inventory report. As a general policy, SCAQMD will allow emission changes only if (1) the changes conform to one of the situations discussed in the following sections and (2) any emission increases are also included.

3.3.1. Computational Errors

Computational errors in the quadrennial emissions inventory report must be reported to SCAQMD staff as soon as detected. Written requests to correct errors for inclusion in the risk assessment must include documentation of the nature of the error and calculations to show how the original emission value was determined and how correcting the computational error changes this value.

3.3.2. Emission Reductions from a Facility's Base Year Emissions Inventory

HRAs in the AB 2588 Program take a 'snapshot' of a base year emissions inventory (or quadrennial emissions inventory report) which is determined by the HRA request letter or notification by the Executive Officer to prepare an ATIR, HRA, or VRRP. This base year is commonly the most recent quadrennial emissions reporting year. Emissions reductions must be verified to be considered as an allowable change. The allowable changes in this section can only be considered as a revision to the quadrennial emissions inventory report that has already been submitted. Modifications after the base year are discussed in Section 3.3.3. Verified emission reductions are those which are permanent and can be substantiated as occurring during the base

¹¹ <http://www.arb.ca.gov/toxics/harp/harp.htm>

¹² <https://oehha.ca.gov/air/cmr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0>

year. Verification requirements include specifications in SCAQMD's permit issued to the facility, a surrender of the existing SCAQMD permit, or reductions as required by SCAQMD rule(s). Letters of intent or internal memos mandating new company policy are not considered verifiable emission reductions.

Examples of verifiable emission reductions include:

- Misreporting of throughput information, inaccurate emission factors, and incorrect emission calculation methodology.
- A previously operating permitted source has been shut down and therefore has no emissions. In order for this to be considered as a verified emissions reduction, the facility must have surrendered the permit to SCAQMD. If a facility chooses to retain the permit for possible use of the equipment in the future, that source cannot be considered a permanent verified emissions reduction. Please send a copy of the letter requesting inactivation of the permit and any other supporting documentation to AB 2588 Program staff.
- A listed substance was no longer used and therefore not emitted in a process at the facility. The permit conditions have previously been modified to reflect this change. A copy of the modified permit or, if not yet available, a copy of the 400A application form requesting a change of permit conditions and a copy of the check for filing fee submitted to SCAQMD must be sent to AB 2588 Program staff.
- Pollution control equipment which has been issued a permit-to-construct, has been installed, and was in operation. Provide a copy of the permit-to-construct (and permit-to-operate, if issued), and show calculations for emission reductions. Provide the references for any emission factors used in the calculations. If source testing data was used to calculate the emissions, provide a copy of the source test protocol and all documentation relating to the results.
- Requirements of new SCAQMD rules that have resulted in permanent and enforceable reductions. Provide documentation on how and when reductions were achieved.

If the facility wishes to use verified emission reductions in their HRA, documentation of these verified changes must be provided.

3.3.3. Modifications in Risk after the Base Year

HRAs in the AB 2588 Program take a 'snapshot' of a base year emissions inventory which is determined by the HRA request letter. This base year is commonly the most recent quadrennial emissions reporting year. In some cases, more recent emissions are substantially different than the base year emissions of a facility due to modifications. Facilities can include information about the more recent emission changes and how those affect health risks in a supplemental appendix to their HRA. If a facility includes supplemental information showing that emissions and health risks have been reduced since the base year, then this more recent emissions scenario can be used when comparing residual health risks against Rule 1402(c)(2) Risk Reduction thresholds as long as the new emissions scenario is based on emission reductions that are permanent, enforceable, and verifiable. The health risks from the base year will still be used when comparing against Rule 1402(c)(12) Public Notification Thresholds. If public notification is required, then the supplemental information about reductions in health risk since the base year can be included in the notification materials.

The facility should contact AB 2588 Program staff to obtain approval and determine if the changes occurring after the base year can be considered as verifiable, enforceable, and permanent emission reductions. Upon approval, the facility must estimate cancer risk, cancer burden, and hazard indices for both the base year and the estimated emissions after the proposed future reductions are complete. The two risk estimates must be presented separately in the HRA submitted to SCAQMD. The dual estimate provides a backup in case reductions proposed by the facility are not implemented as planned. Note that new emissions or emission increases, due to process changes or new equipment, must also be quantified and included in any HRA which incorporates emission reductions since the quadrennial emissions inventory was prepared.

3.3.4. New Source Testing Data

Data from new or yet to be completed source tests will not be approved for use in the preparation of the required HRA if an ATIR has already been approved without the use of those source tests. However, if a facility has already conducted and completed the source test with an SCAQMD-approved source test protocol, and all supporting documentation is provided to AB 2588 Program staff, it may be considered for approval. SCAQMD staff will notify the facility in writing if new source test results are approved for use in the HRA. Please call AB 2588 Program staff if you submit a request and have not been notified regarding approval before submitting the HRA.

If a facility wishes to provide unapproved source test data for informational purposes only, it must be presented in an alternate HRA (i.e., as an appendix to the HRA). The alternate HRA must be presented with separate findings and discussion of cancer risk and hazard indices. Failure to completely separate the alternate HRA from the required analysis is grounds for rejection of the HRA.

3.3.5. Diesel Particulate Matter Emissions

Diesel particulate matter emissions were identified as a toxic air contaminant by CARB in 1998, and were added to the list of compounds in SCAQMD *Rule 1401 – New Source Review* on March 7, 2008. Under the current AB 2588 Air Toxics “Hot Spots” Emission Inventory Criteria and Guidelines Regulation, amended on August 27, 2007, facility operators are required to include health risks of any diesel exhaust particulate emissions from stationary emergency and prime compression ignition internal combustion engines, as well as portable diesel engines. Please clearly identify emergency diesel internal combustion engines (DICEs) and their corresponding emissions. This is essential because, on January 5, 2007, the SCAQMD Governing Board adopted separate public notification procedures for emergency DICEs.¹³

3.4. Uncertainty Analyses and Alternative HRAs

The 2015 OEHHA HRA Guidelines describe uncertainty analyses (or HRAs with alternate assumptions) that may be provided at the discretion of SCAQMD. SCAQMD staff will allow such analyses to be included as one of the appendices to the facility's HRA. This analysis would be a supplement to the primary HRA that is carried out using the assumptions presented in the 2015

¹³ <http://www3.aqmd.gov/hb/2007/January/070128a.html>

OEHHA HRA Guidelines and the guidelines included. Deviations from the OEHHA Tier-1 point estimate methodology must be described in detail at the beginning of the appendix and the reasons for the alternative assumptions must also be described in detail with supporting documentation.

All analyses and discussion relating to an alternative analysis must appear under a separate title such as "Alternative Analysis" in an appendix to the HRA. If an alternative HRA is mixed together with the Tier-1 analysis and not presented in a separate appendix of the document as required by OEHHA and SCAQMD guidelines, the HRA will be considered unacceptable and returned to the facility owner/operator for revision. An alternative HRA is also held to the same grounds for rejection as the primary HRA in accordance with Rule 1402(e).¹⁴

3.5. HRA Format

The format for the HRA must follow the detailed outline presented in Appendix B of these Supplemental Guidelines. A completed HRA Summary must be included in the Executive Summary of all HRAs submitted to SCAQMD; a sample of the form can be downloaded from SCAQMD's AB 2588 Program website.¹⁵ The detailed HRA outline provided in Appendix B lists the HARP computer files to be included electronically with the HRA. All copies of electronic file(s) should be sent to AB 2588 Program staff. The HRA should also be submitted electronically (i.e., PDF format).

Cancer risk values should be reported to the nearest tenth and should be rounded up from 5 (e.g., 5.05 in a million is rounded up to 5.1 in a million). Non-cancer risk values should be reported to the nearest hundredth and should be rounded up from 5 (e.g., a hazard index (HI) of 0.105 is rounded to 0.11).

3.6. Public Notification, Risk Reduction, and Voluntary Risk Reduction Levels

The SCAQMD Governing Board has adopted risk levels for purposes of public notification pursuant to the AB 2588 Program. In addition, SCAQMD Rule 1402 establishes action risk levels that require risk reduction; the levels are summarized in Table 3 below and the elements to include in a RRP are included in Appendix D of these Supplemental Guidelines. Additional information regarding SCAQMD's public notification procedures are available on the website.¹⁶

Rule 1402 includes a provision to allow facilities to participate in the Voluntary Risk Reduction Program. If facilities choose to participate, they voluntarily reduce their health risk beyond the Action Risk Level to below the Notification Risk Level in lieu of the traditional AB 2588 Program process. Facilities also perform a modified public notification that does not require distribution of individual letters and public meetings as in the traditional AB 2588 Program approach. Additional information regarding qualifications and procedures for SCAQMD's Voluntary Risk Reduction Program are available on SCAQMD's website.¹⁷

¹⁴ <http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1402.pdf?sfvrsn=4>

¹⁵ <http://www.aqmd.gov/home/rules-compliance/compliance/toxic-hot-spots-ab-2588/forms>

¹⁶ <http://www.aqmd.gov/nav/about/public-notice/ab-2588-notice>

¹⁷ http://www.aqmd.gov/docs/default-source/planning/risk-assessment/vrrp_guidelines.pdf?sfvrsn=4

Table 3. Public Notification, Risk Reduction, and Voluntary Risk Reduction Levels

Risk Variable	Public Notification Levels	Risk Reduction Levels	Voluntary Risk Reduction Levels
Cancer risk	≥ 10 in a million	≥ 25 in a million	≥ 10 in a million
Non-cancer risk	HI > 1	HI ≥ 3	HI > 1
Cancer burden	--	≥ 0.5 excess cancer cases	--

3.7. Maximum Exposed Individual

To identify the location of the maximum exposed individual, it is necessary to examine current land use and allowable land use in the vicinity of the point of maximum impact (residential, commercial/industrial, or mixed use). Currently, the use of block group or census tract centroids as surrogates for the maximum exposed individual does not provide sufficient spatial resolution and will not be approved.

Cancer risk and non-cancer chronic hazard indices (HI) must be provided for both the most exposed residential and the most exposed commercial/industrial receptors. The non-cancer acute HI must be provided for the offsite point of maximum impact (PMI). Additionally, cancer risk and HI values at each sensitive receptor located within the zone of impact must be presented in a table. The zone of impact is discussed in the next section.

3.8. Zone of Impact

In an HRA, it is necessary to define a zone of impact or a method to set boundaries on the analysis. For AB 2588 purposes, SCAQMD requires that the HRA must encompass the area subject to an added lifetime cancer risk (all pathways) of one in one million or greater (i.e. $\geq 1.0 \times 10^{-6}$). For non-cancer risks, the analysis must bound the area subject to an HI greater than or equal to one half (≥ 0.5).

3.9. Land Use Considerations

Risk estimates are sensitive to land uses (e.g. residential, commercial, vacant) since these factors can affect exposure assumptions. If residential or worker risks are not calculated at the PMI because the land is currently vacant, then the location, zoning and potential future land uses must be discussed. Updated information on current land uses is requested when updated emission estimates are reported to SCAQMD.

3.10. Maps

Maps showing the location of the source in relation to the zone of impact must be submitted. Dispersion modeling for sources should be conducted with receptors defined in terms of Universal Transverse Mercator (UTM) coordinates and a World Geodetic System 1984 (WGS84) spatial reference system. For cancer risk, total risk isopleths for facilities should be plotted on the street

map provided using HARP at cancer risk intervals of 1, 10, 25, and 100 in a million. Isopleths for non-cancer HI must include levels corresponding to an HI of 0.5, 1.0, 3.0, and 5.0.

Separate maps should be provided for each of the four risk variables: cancer risks, non-cancer acute risks, non-cancer chronic risks, and non-cancer 8-hour chronic risks. The maps must contain an accurate scale for measuring distances and a legend. The map scale that can accommodate the isopleths and show the greatest level of detail must be used. The names of streets and other locations must be presented and be legible.

The location of schools, hospitals, day-care centers, other sensitive receptors, residential areas and work-sites within the zone of impact must be identified on the map. If the area of the zone of impact is very large, then more detail should be devoted to higher concentration/risk areas versus lower risk areas. The land uses in the vicinity of the PMI must be shown in detail. This may require a separate map. If sensitive receptors are located within the zone of impact, then cancer risk and HI values must also be presented in the form of a table including all the sensitive receptors.

3.11. Air Dispersion Modeling

Air dispersion modeling is performed for the exposure assessment of the HRA. A basic understanding of dispersion modeling is presumed. For a more detailed overview of regulatory modeling procedures, refer to the U.S. EPA's "Guideline on Air Quality Models¹⁸" and/or the 2015 OEHHA HRA Guidelines.

3.11.1. Facility Description and Source Information

The HRA should contain a brief description of the facility and its activities as shown in the detailed HRA outline provided in Appendix B. Table 4 lists the information on the facility and its surroundings that must be provided in the modeling analysis. The facility location is used to determine the most representative meteorological data for the analysis. The nearby land use is needed to properly label receptors as residential, commercial, sensitive, etc.

The facility plot plan (including a length scale) is needed to determine all source locations including their elevations above sea level, building dimensions, and the property boundary. The operating schedule, the hourly emission rates, the annual average emission rates, and the source parameters listed in Table 4 are necessary to accurately characterize the source emissions. Please refer to the detailed outline provided in Appendix B for additional information and guidance.

¹⁸ <https://www.epa.gov/scram/air-quality-dispersion-modeling-preferred-and-recommended-models>

Table 4. Required Source Information

<p>Information on the Facility and Its Surroundings</p> <ul style="list-style-type: none"> • Location (i.e., address and UTM coordinates in WGS84) • Local land use (within 20 km) • Local topography (within 20 km) • Facility plot plan <ul style="list-style-type: none"> - Property boundaries - Horizontal scale - Building heights (for building downwash calculations) - Source locations including elevations <p>Point Source Information (stacks, vents, etc.)</p> <ul style="list-style-type: none"> • Maximum and average hourly emission rates • Annual emissions • Stack location (in UTM coordinates in WGS84) on plot plan including elevation • Stack height • Stack gas exit velocity • Stack gas exit temperature • Building dimensions, heights, and location <p>Fugitive Source Information (area and volume sources)</p> <ul style="list-style-type: none"> • Maximum and average hourly emission rates • Annual emissions • Source location (in UTM coordinates in WGS84) on plot plan including elevations • Source height • Area or volume dimensions

3.11.2. Model Selection and Model Options

All HRAs prepared for the AB 2588 Program must use the most recent version of HARP.¹⁹ U.S. EPA's air quality dispersion model, AERMOD, is used by HARP for the exposure assessment. AERMOD is a Gaussian plume model capable of estimating pollutant concentrations from a wide variety of sources that are typically present in an industrial source complex. Emission sources are categorized into four basic types: point, area, volume, and open pit sources. AERMOD estimates hourly concentrations for each source/receptor pair and calculates concentrations for user-specified averaging times, including an average concentration for the complete simulation period. AERMOD includes atmospheric dispersion options for both urban and rural environments and can address flat, gently rolling, and complex terrain situations. AERMOD documentation is available on the U.S. EPA website.²⁰ Table 5 summarizes the default dispersion modeling assumptions recommended by SCAQMD. AERMOD-ready meteorological data are available on SCAQMD's website.²¹

¹⁹ <https://www.arb.ca.gov/toxics/harp/harp.htm>

²⁰ <https://www.epa.gov/scram/air-quality-dispersion-modeling-preferred-and-recommended-models>

²¹ <http://www.aqmd.gov/home/air-quality/air-quality-data-studies/meteorological-data>

Table 5. Summary of SCAQMD Dispersion Modeling Guidance

Parameter	Assumption
Model Control Options	
• Use Regulatory Default?	Yes
• Urban or Rural?	Urban
Source Options	
• Include Building Downwash?	Yes
Meteorology Options	
• Meteorological Data	AERMOD-ready data available on SCAQMD website. See section 3.11.3.

AERMOD should be executed using the urban dispersion parameters (i.e., URBAN), which is SCAQMD policy for all air quality impact analyses in its jurisdiction. The U.S. EPA regulatory default options should be used for all projects. If non-default options are used, a justification must be included and SCAQMD staff approval is needed.

3.11.3. Meteorological Data

SCAQMD has AERMOD-ready meteorological data for the South Coast Air Basin available on the SCAQMD website including a map showing the locations of meteorological stations with AERMOD-ready data, a table listing the meteorological data for the meteorological stations, and a list of station data including abbreviations, geographical information, and surface characteristics.²²

The most representative meteorological station should be chosen for modeling which in most cases, is the nearest station; however, an intervening terrain feature may dictate the use of an alternate station. Modelers should contact AB 2588 Program staff regarding the most representative meteorological station, if necessary. The data are available on the following SCAQMD website.²³

3.11.4. Receptor Grid

Air dispersion modeling is required to estimate (a) annual average concentrations to calculate the Maximum Individual Cancer Risk (MICR), the maximum chronic HI, the zones of impact, and excess cancer burden and (b) peak hourly concentrations to calculate the health impact from substances with acute non-cancer health effects. To achieve these goals, the receptor grid should begin at the facility fence line and extend to cover the zone of impact. In addition, the receptor grid should be fine enough to identify the points of maximum impact.

To identify the maximum impacted receptors (i.e., peak cancer risk and peak hazard indices) a grid spacing of 100 meters or less must be used. All receptors should be identified in UTM coordinates. Receptor grid points outside of the facility boundary must be placed so that individual grid points

²² <http://www.aqmd.gov/home/air-quality/air-quality-data-studies/meteorological-data>

²³ <http://www.aqmd.gov/home/air-quality/air-quality-data-studies/meteorological-data/data-for-aermod>

are placed at UTM coordinates ending in “00” (e.g., grid point UTM East 572300 and UTM North 3731000). Receptor grids with less than 100 meter spacing must include grid points at UTM coordinates ending in “00.” Elevations must be provided for all receptor grids.

Receptors on the facility boundary must be placed along the boundary following the maximum spacing requirements shown in Table 6. Sensitive receptors must be identified by exact UTM coordinates. Elevations must be provided for all receptors.

Table 6. Maximum Receptor Spacing Requirements for Fenceline Receptors

Area of Facility	Maximum Receptor Spacing
Area < 4 acres	20 meters
4 acres ≤ Area < 10 acres	30 meters
10 acres ≤ Area < 25 acres	50 meters
25 acres ≤ Area < 100 acres	75 meters
Area ≥ 100 acres	100 meters

3.11.5. Stacks with Raincaps and Area Sources

Emission release points with raincaps or which are oriented so that the exhaust is vented downward or horizontally may not use the velocity inside the stack as the vertical velocity of the point source in the model. However, as a point source must be modeled with some vertical velocity, these stacks may be modeled with a positive vertical velocity of no more than 0.01 meters per second. In general, if there is uncertainty on how to represent sources in a model, AB 2588 Program staff should be consulted before proceeding with modeling.

According to U.S. EPA guidance for area sources in AERMOD, the aspect ratio (i.e., length/width) for area sources should be less than 10 to 1. If this is exceeded, then the area should be subdivided to achieve a 10 to 1 or less aspect ratio for all sub-areas.

3.12. HRA

SCAQMD requires that all HRAs for the AB 2588 Program be prepared in accordance with OEHHA and CARB guidance²⁴ and using the latest approved version of HARP. The OEHHA Guidelines requires at least a Tier-1 evaluation, which allows for Derived Risk Calculations. The Derived method uses high end exposure parameters for the top two exposure pathways and mean exposure parameters for the remaining pathways for cancer risk estimates. For chronic non-cancer assessments, the Derived method uses high end exposures for the top three exposure pathways. CARB has developed an updated Risk Management Policy that includes recommendations for inhalation exposures,²⁵ which recommends using high end breathing rates (95th percentile) for children from the 3rd trimester through age 2, and 80th percentile breathing rates for all other ages

²⁴<https://oehha.ca.gov/air/crnrr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0>

²⁵Information regarding CARB’s Risk Management policy can be located at: <https://www.arb.ca.gov/toxics/toxics.htm>

for residential exposures. In accordance with these guidelines, SCAQMD recommends Derived Risk Calculations using CARB's Risk Management Policy to be prepared and presented in an HRA. CARB prepared HARP to facilitate the preparation and transmittal of a compliant ATIR and HRA. The details are provided below.

3.12.1. OEHHA Guidance

OEHHA's guidance for preparing HRAs is contained in the *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*.²⁶ This guidance manual has undergone public and peer review, was endorsed by the California Scientific Review Panel (SRP), and approved by OEHHA in March 2015.

The 2015 OEHHA HRA Guidelines recognizes four types of evaluations.

Tier-1: point estimate, using standard assumptions

Tier-2: point estimate, using site-specific details

Tier-3: stochastic risk, using standard assumptions

Tier-4: stochastic risk, using site-specific details

The details are described in the 2015 OEHHA HRA Guidelines.

“Tier-1 is a standard point-estimate approach using the recommended point-estimates presented in this document. [...] Tier-1 evaluations are required for all HRAs prepared for the Hot Spots Program.” (see Section 2.5.3. of 2015 OEHHA HRA Guidelines²⁶)

“[T]he Tier-1 evaluation is useful in comparing risks among a large number of facilities and must be included in all HRAs.” (see Section 8.2.5.C. of 2015 OEHHA HRA Guidelines²⁶)

As such, SCAQMD requires that all HRAs for the AB 2588 Program contain at least a Tier-1 evaluation. The results of the Tier-1 evaluation are used for comparative and regulatory purposes (i.e., risk status, fee category, public notice, and risk reduction).

The Executive Summary and main body of the HRA shall contain only statements regarding the results of the Tier-1 evaluation. Tier-2, Tier-3, and Tier-4 evaluations should not be in the Executive Summary or main document; they may be prepared and presented as appendices to the main document. Site specific details for either a Tier-2, Tier-3, or Tier-4 evaluation will require review and approval by OEHHA, CARB, and SCAQMD.

3.12.3. HARP

HARP is designed to meet the programmatic requirements of the AB 2588 Program and will calculate all four OEHHA Tiers, both the Derived Risk Calculations (as designed by OEHHA), and CARB's “Risk Management Policy Inhalation Rates for Residential Cancer Risk Calculations.”

²⁶<https://oehha.ca.gov/air/crnrr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0>

The outline for an HRA is contained in Appendix B. The list of files that must be submitted with an HRA for the AB 2588 Program are included in Table 7. Any emissions factor development, emission rate calculations, or approved source test protocol and reports must be submitted in electronic format (e.g., in Microsoft Excel). If these items have been attached to the AER report, please refer to it in the cover letter to avoid a redundant submittal.

Table 7. Files that must be provided with HRA submittals

File Type	Notes
HRA Input	All files created by CARB's Air Dispersion Modeling and Risk Tool (ADMRT) Module
HRA Output	
Dispersion Modeling Input	All AERMOD and BPIP files used in the HRA including terrain data. All meteorological data files including any AERMET files if default SCAQMD meteorological data is not used.
Dispersion Modeling Output	
Emission Inventory Input	All files created by CARB's Emission Inventory Module (EIM)
Emission Inventory Output	
Emission Calculations	Provided in electronic format (e.g., Excel) and documented references (i.e. sample calculations)
Source Tests	Only SCAQMD-approved source tests can be used. SCAQMD approval must be included in submittal.
Air Monitoring Data	Any monitoring data used in the HRA should be provided.

3.12.4. SCAQMD's Default Assumptions for HRAs

All HRAs prepared for SCAQMD must include an OEHHA Tier-1 evaluation. All SCAQMD risk management decisions are based on the Tier-1 evaluation. Tier-2, Tier-3, and Tier-4 evaluations may be prepared but must be included in an appendix to the HRA. The results of the Tier-2, Tier-3, and/or Tier-4 evaluations must not be included in the Executive Summary or main body of the HRA. Table 8 summarizes the HRA assumptions required by SCAQMD. Deviations from these defaults must be approved by SCAQMD staff prior to their use.

Residential cancer risks assume a 30-year exposure (cancer burden assumes a 70-year exposure) and must include, at a minimum, the following pathways: home grown produce, dermal absorption, soil ingestion, and mother's milk. A deposition velocity of 0.02 m/s should be assumed for the non-inhalation pathways. The HRA should assume default values in HARP for all pathways with the exception of the dermal pathway which should assume a "warm" climate. The other pathways of fish ingestion, dairy milk ingestion, drinking water consumption, and meat (i.e., beef, pork, chicken, and egg) ingestion should be included only if the facility impacts a local fishable body of water, grazing land, dairy, or water reservoir. The "RMP Using the Derived Method" risk calculation option should be used for estimating cancer risks at residential receptors. To estimate chronic non-cancer risks at residential receptors the "OEHHA Derived Method" risk calculation option should be used. The 8-hour chronic non-cancer risk should also be calculated for residential receptors for any source that operates at least 8 hours per day and 5 days per week.

Table 8. Summary of SCAQMD Health Risk Assessment Guidance

Parameter	Assumptions
Multipathway	
• Inhalation	Required for residential and worker receptors
• Dermal	Required for residential and worker receptors
• Soil	Required for residential and worker receptors
• Homegrown Produce	Required for residential receptors
• Mother's Milk	Required for residential receptors
• Beef/Dairy	Site specific
• Pigs, Chickens, and/or Eggs	Site specific
• Deposition Velocity	0.02 meters per second
• MP Exposure Assumptions	Use HARP defaults except for dermal pathway which uses "warm" climate
Residential Cancer Risk Assumptions	
• Exposure Duration	30 years for individual receptors 70 years for cancer burden
• Analysis Option	RMP Using the Derived Method
Worker Cancer Risk Assumptions	
• Exposure Duration	25 years
• Analysis Option	OEHHA Derived Method
Residential and Worker Non-Cancer Risk Assumptions	
• Analysis Option	OEHHA Derived Method

Worker cancer risks assume a 25-year exposure and must include the pathways of dermal absorption and soil ingestion. A deposition velocity of 0.02 m/s should be assumed for these pathways and the dermal pathway should assume a 'warm' climate. The "OEHHA Derived Method" risk calculation option should be used for estimating cancer and non-cancer chronic risks at worker receptors.

The air concentration that the neighboring workers breathe when present at work is different than the annual average concentration calculated by AERMOD. The annual average estimated by AERMOD is a 24 hours per day, 7 days per week, 365 days per year average, regardless of the actual operating schedule of the emitting facility. It is assumed the off-site worker is impacted by the toxic emissions only during work hours. Thus, the model-predicted concentrations must be adjusted by a multiplying factor to reflect the pollutant concentration that the worker breathes. For example, suppose that the off-site worker and the emitting facility have the same operating schedule, perhaps 8 hours per day, 5 days per week, and 52 weeks per year. The annual average concentrations predicted by AERMOD must be adjusted by a factor of 4.2 (i.e., $7/5 \times 24/8$). Please refer to the 2015 OEHHA HRA Guidelines for further information.

The adjustment factors for all possible operating schedules are provided in Tables 5.1 and 5.2 of *SCAQMD Permit Application Package "N" For Use in Conjunction with the Risk Assessment*

*Procedures for Rules 1401, 1401.1, and 212.*²⁷ These factors are entered into HARP by activating the Worker Adjustment Factor (WAF) option in the Inhalation Pathway and entering the appropriate factor from either one of the tables.

The adjustments in Tables 5.1 and 5.2 should only be applied when estimating worker cancer risks for facilities that do not operate continuously. The adjustments are not applicable to residential cancer risks and to residential or worker chronic non-cancer risks.

²⁷ <http://www.aqmd.gov/docs/default-source/permitting/rule-1401-risk-assessment/attachmentn-v8-1.pdf>

Appendix A
Elements of an Air Toxics Inventory Report

1. Report Summary (hard copy)

- Facility name, Facility ID, and location
- Facility plot plan identifying: emission source location, property line, horizontal scale, and building heights and dimensions
- Facility total emission rate by substance for all emittants including the following information (2015 OEHHA HRA Guidelines Appendix A-I Substances must be quantified in the inventory report):
 - substance name and CAS number
 - annual average emission for each substance (lb/yr and g/s)
 - maximum one-hour emissions for each substance (lbs/hr and g/s)
- Supporting documentation such as source test report and SCAQMD approval letter if emissions are measured

2. Use the EIM portion of HARP to provide facility, device, process, emissions, and stack data in a HARP database, including but not limited to the following information:

- Source identification number used by the facility
- Source name
- SCAQMD permit number if available
- Source location using UTM coordinates (in meters) with a WGS84 projection
- Source base elevation (m)
- Source height (m)
- Source dimensions (e.g., stack diameter, building dimensions, area/volume size, etc.) (m)
- Stack gas exit velocity (m/s) if applicable
- Stack gas volumetric flow rate (ACFM) if applicable
- Stack gas exit temperature (K)
- Number of operating hours per day
- Number of operating days per week
- Number of operating weeks per year
- Report emission control equipment and efficiency by source and by substance.

The description should be brief.

- Report annual average and maximum hourly emission rates for each toxic substance for each source
- Report emission inventory methods indicating whether emissions are measured or estimated

Appendix B
Outline for the HRA

I. Table of Contents

- Section headings with page numbers indicated
- Tables and figures with page numbers indicated
- Definitions and abbreviations. Must include a definition of acute, 8-hour chronic, chronic, and cancer health impacts
- Appendices with page numbers indicated

II. Executive Summary

- Name of facility and the complete address
- Facility ID number
- Description of facility operations and a list identifying emitted substances, including a table of maximum 1-hour and annual emissions in units of lbs/hr and lbs/yr, respectively
- List the multipathway substances and their pathways
- Text presenting overview of dispersion modeling and exposure assessment
- Text defining dose-response assessment for cancer and non-cancer health impacts and a table showing target organ systems by substance for non-cancer impacts
- Summary of results (See Attachment A to this Appendix). Potential cancer risks for residents must be based on 30-year, Tier-1 analysis and potential cancer risks for workers must be based on 25-year, Tier-1 analysis. Cancer burden results must be based on 70-year, Tier-1 analysis
 - Location (address or UTM coordinates) and description of the off-site PMI, maximum exposed individual resident (MEIR), and maximum exposed individual worker (MEIW). See Attachment A for the required summary form
 - Location (address or UTM coordinates) and description of any sensitive receptors that are above a cancer risk of ten in one million or above a non-cancer health HI of one
 - Text presenting an overview of the total potential multipathway cancer risk at the PMI, MEIR, MEIW, and sensitive receptors (if applicable). Provide a table of cancer risk by substance for the MEIR and MEIW. Include a statement indicating which of the substances appear to contribute to (i.e., drive) the potential health impacts. In addition, identify the exposure pathways evaluated in the HRA
 - Provide a map of the facility and surroundings and identify the location of the MEIR, MEIW, and PMI
 - Provide a map of 30-year lifetime cancer risk zone of impact (i.e., 1 in one million risk contour), if applicable. Also show the 10, 25, and 100 in one million risk contours, if applicable. If the cancer burden is greater than 0.5, then a map showing the 1 in one million risk contour based on a 70-year lifetime should also be presented
 - Text presenting an overview of the acute and chronic non-cancer hazard quotients or the (total) hazard indices for the PMI, MEIR, MEIW, and sensitive receptors.

Include separate statements (for acute, 8-hour chronic, and annual chronic exposures) indicating which of the substances appear to drive the potential health impacts. In addition, clearly identify the primary target organ(s) that are impacted from acute and chronic exposures

- Identify any subpopulations (e.g., subsistence fishers) of concern
- Table and text presenting an overview of estimates of population exposure
- Version of the Risk Assessment Guidelines and computer program(s) used to prepare the risk assessment

III. Main Body of Report

A. Hazard Identification

- Table and text identifying all substances emitted from the facility. Include the CAS number of substance and the physical form of the substance if possible. The complete list of the substances to be considered is contained in Appendix A of the 2015 OEHHA HRA Guidelines²⁸
- Table and text identifying all substances that are evaluated for cancer risk and/or non-cancer acute and chronic health impacts. In addition, identify any substances that present a potential cancer risk or chronic non-cancer hazard via non-inhalation routes of exposure
- Describe the types and amounts of continuous or intermittent predictable emissions from the facility that occurred during the reporting year. As required by statute, releases from a facility include spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping (fugitive), leaching, dumping, or disposing of a substance into ambient air. Include the substance(s) released and a description of the processes that resulted in long-term and continuous releases

B. Exposure Assessment

This section describes the information related to the air dispersion modeling process that should be reported in the risk assessment. In addition, doses calculated by pathway of exposure for each substance should be included in this section. The educated reader should be able to reproduce the risk assessment without the need for clarification. The location of any information that is presented in appendices, on electronic media, or attached documents that supports information presented in this section, must be clearly identified by title and page number in this section's text and in the document's table of contents.

B.1 Facility Description

²⁸ <https://oehha.ca.gov/air/crnrr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0>

Report the following information regarding the facility and its surroundings:

- Facility name
- Facility ID number
- Facility location (i.e., address)
- Local topography
- Facility plot plan identifying: emission source locations, property line, horizontal scale, building heights and dimensions
- Description of the site/route dependent exposure pathways. Provide a summary of the site-specific inputs used for each pathway (e.g., water or grazing intake assumptions). This information may be clearly presented and cross-referenced to the text in an appendix

B.2 Emissions Inventory

Report the following information regarding the facility's sources and emissions in table format; see Appendix K of 2015 OEHHA HRA Guidelines.²⁹ Depending on the number of sources and/or pollutants, this information may be placed in the main body of the report or in an appendix

- Source identification number used by the facility
- Source name
- Source location using UTM coordinates (in meters); with a WGS84 projection
- Source base elevation (m)
- Source height (m)
- Source dimensions (e.g., stack diameter, building dimensions, area/volume size, etc.) (m)
- Stack gas exit velocity (m/s) if applicable
- Stack gas volumetric flow rate (ACFM) if applicable
- Stack gas exit temperature (K)
- Number of operating hours per day and per year
- Number of operating days per week
- Number of operating days or weeks per year
- Report emission control equipment and efficiency by source and by substance. The description should be brief.
- Report emission inventory methods indicating whether emissions are measured or estimated.
- Report emission rates for each toxic substance, grouped by source, in table form

²⁹<https://oehha.ca.gov/air/crnrr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0>

including the following information (see Appendix K of 2015 OEHHA HRA Guidelines). Depending on the number of sources and/or pollutants, this information may be placed in the main body of the report or in an appendix

- Source name
- Source identification number
- Substance name and CAS number
- Annual average emissions for each substance (lbs/yr and g/s). Radionuclides are reported in curies/yr
- Maximum one hour emissions for each substance (lbs/hr and g/s). Radionuclides are reported in millicuries/yr
- Report facility total emission rates by substance for all emittants including the following information (see Appendix K of 2015 OEHHA HRA Guidelines). This information should be in the main body of the report
- Substance name and CAS number
- Annual average emissions for each substance (lbs/yr and g/s). Radionuclides are reported in curies/yr
- Maximum one-hour emissions for each substance (lbs/hr and g/s). Radionuclides are reported in millicuries/yr

B.3 Air Dispersion Modeling

- The HRA should indicate the source and time period of the meteorological data used. Include the meteorological data electronically with the HRA. SCAQMD has AERMOD-ready meteorological data for available stations in the South Coast Air Basin. This data can be downloaded from SCAQMD's website³⁰
- Include proper justification for using the meteorological data. The nearest representative meteorological station should be chosen for modeling. Usually this is simply the nearest station to the facility; however, an intervening terrain feature may dictate the use of an alternate site
- The latest approved version of AERMOD and HARP should be used for all HRAs prepared for the AB 2588 Program
- Table and text that specifies the following information:
 - Selected model options and parameters
 - Receptor grid spacing
- For the PMI, MEIR, MEIW, and any sensitive receptors required by SCAQMD, include tables that summarize the annual average concentrations calculated for all substances
- For the PMI, MEIR, MEIW, and any sensitive receptors required by SCAQMD,

³⁰ <http://www.aqmd.gov/home/air-quality/air-quality-data-studies/meteorological-data>

include tables that summarize the maximum one-hour; chronic 8-hour; and 90-day rolling average (lead only) concentrations

C. Risk Characterization

HARP generates the risk characterization data needed for the outline below. Any data needed to support the risk characterization findings should be clearly presented and referenced in the text and appendices. A listing of HARP files that meet these HRA requirements are provided in Section V. All HARP files should be included in the HRA. Ideally, the HRA report and a summary of data used in the HRA should be on paper and all data and model input and output files should be provided electronically.

The potential cancer risk for the PMI, MEIR, and sensitive receptors of interest must be presented in the HRA's text, tables, and maps using a residential 30-year exposure period. MEIW location should use appropriate exposure periods. For the AB 2588 Program, the 30-year exposure duration should be used as the basis for residential public notification and risk reduction audits and plans. All HRAs must include the results of a Tier-1 exposure assessment. If persons preparing the HRA would like to present additional information (i.e., exposure duration adjustments or the inclusions of risk characterizations using Tier-2 through Tier-4 exposure data), then this information should be presented in separate, clearly titled, sections, tables, and text.

The following information should be presented in this section of the HRA. If not fully presented here, then by topic, clearly identify the section(s) and pages within the HRA where this information is presented.

- Description of receptors to be quantified
- Identify the site/route dependent exposure pathways (e.g., water ingestion) for the receptor(s), where appropriate (e.g., MEIR). Provide a summary of the site-specific inputs used for each exposure pathway (e.g., water or grazing intake assumptions). In addition, provide reference to the appendix (section and page number) that contains the modeling (i.e., HARP/dispersion modeling) files that show the same information
- Tables and text providing the following information regarding the potential multipathway cancer risks at the PMI, MEIR, MEIW, and any sensitive receptors of concern:
 - Location in UTM coordinates
 - Contribution by substance
 - Contribution by source
- Tables and text providing the following information regarding the acute non-cancer hazard quotient at the PMI, MEIR, MEIW, and any sensitive receptors of concern:
 - Location in UTM coordinates
 - Target organ(s)
 - Contribution by substance
 - Contribution by source

- Tables and text providing the following information regarding the chronic non-cancer (inhalation and oral) hazard quotient at the PMI, MEIR, MEIW, and any sensitive receptors of concern:
 - Location in UTM coordinates
 - Target organ(s)
 - Contribution by substance
 - Contribution by source
- Table and text presenting estimates of population exposure. Tables should indicate the number of persons exposed to a total cancer risk greater than 10^{-6} , 10^{-5} , 10^{-4} , etc. and total hazard quotient or HI greater than 0.5, 1.0, 3.0, and 5.0. Total excess cancer burden should also be provided
- Provide maps that illustrate the HRA results as noted below. The maps should be an actual street map of the area impacted by the facility with UTM coordinates and facility boundaries clearly labeled. This should be a true map (i.e., one that shows roads, structures, etc.), drawn to scale, and not a schematic drawing. Color aerial photos are usually the most appropriate choice. The following maps are required:
 - Locations of the PMI, MEIR, MEIW, and sensitive receptors for the cancer and non-cancer acute and chronic risks. Also show the facility emission points and property boundary
 - Total cancer risk (including multipathway factors) contours for the following risk levels: 100, 25, 10, and 1 in a million. Maps should be provided for the minimum exposure pathways (i.e., inhalation, soil ingestion, dermal exposure, and mother's milk) and for all applicable exposure pathways (i.e., minimum exposure pathways plus additional site/route specific pathways). Include the facility location on the maps
 - Non-cancer acute and chronic HI contours for the following levels: 5.0, 3.0, 1.0 and 0.5. Include the facility location
- The risk assessor may want to include a discussion of the strengths and weaknesses of the risk analyses and associated uncertainty directly related to the facility HRA
- If appropriate, comment on the possible alternatives for control or remedial measures
- If possible, identify any community concerns that influence public perception of risk

D. References

IV. **Appendices**

The appendices should contain all data, sample calculations, assumptions, and all modeling and risk assessment files that are needed to reproduce the HRA results. All data and model input and output files should be provided electronically (e.g., uploaded to SCAQMD's OnBase system or on USB Flash Drive). All appendices and the information they contain should be referenced, clearly titled, and paginated. The following are potential appendix topics unless presented elsewhere in the HRA:

- List of all receptors in the zone of impact and their associated risks
- Emissions by source
- Census data
- Maps and facility plot plan
- All calculations used to determine emissions, concentrations, and potential health impacts at the PMI, MEIR, MEIW, and sensitive receptors
- Presentation of alternate risk assessment methods (e.g., alternate exposure durations, or Tier-2 to Tier-4 evaluations with supporting information)

V. Computer Files

The list of electronic files that must be submitted for the HRA are found in Table 7 of Chapter 3 of this document. They must be useable (i.e., can be opened and run in AERMOD/HARP if file is an AERMOD/HARP file). Any supplementary files should be submitted in formats that will not lose formatting in transfer (i.e. pdf for text documents).

Attachment A to Appendix B

HRA Summary Form

This summary form should accompany all HRAs and be presented at the beginning of the Executive Summary.



South Coast Air Quality Management District
 21865 Copley Drive, Diamond Bar, CA 91765-4182
 (909) 396-2000 • www.aqmd.gov

HEALTH RISK ASSESSMENT SUMMARY FORM

(Required in Executive Summary of HRA)

Facility Name : _____
 Facility Address: _____
 Type of Business: _____
 SCAQMD ID No.: _____

A. Cancer Risk

(One in a million means one chance in a million of getting cancer from being constantly exposed to a certain level of a chemical over a period of time)

1. Inventory Reporting Year : _____
2. Maximum Cancer Risk to Receptors : *(Offsite and residence = 30-year exposure, worker = 25-year exposure)*
 - a. Offsite _____ in a million Location: _____
 - b. Residence _____ in a million Location: _____
 - c. Worker _____ in a million Location: _____
3. Substances Accounting for 90% of Cancer Risk: _____
 Processes Accounting for 90% of Cancer Risk: _____
4. Cancer Burden for a 70-yr exposure: *(Cancer Burden = [cancer risk] x [# of people exposed to specific cancer risk])*
 - a. Cancer Burden _____
 - b. Number of people exposed to >1 per million cancer risk for a 70-yr exposure _____
 - c. Maximum distance to edge of 70-year, 1×10^{-6} cancer risk isopleth (meters) _____

B. Hazard Indices

*[Long Term Effects (chronic) and Short Term Effects (acute)]
 (non-carcinogenic impacts are estimated by comparing calculated concentration to identified Reference Exposure Levels, and expressing this comparison in terms of a "Hazard Index")*

1. Maximum Chronic Hazard Indices:
 - a. Residence HI: _____ Location: _____ toxicological endpoint: _____
 - b. Worker HI : _____ Location: _____ toxicological endpoint: _____
2. Substances Accounting for 90% of Chronic Hazard Index: _____
3. Maximum 8-hour Chronic Hazard Index:

8-Hour Chronic HI: _____ Location: _____ toxicological endpoint: _____
4. Substances Accounting for 90% of 8-hour Chronic Hazard Index: _____
5. Maximum Acute Hazard Index:

PMI: _____ Location: _____ toxicological endpoint: _____
6. Substances Accounting for 90% of Acute Hazard Index: _____

C. Public Notification and Risk Reduction

1. Public Notification Required? Yes No
 a. If 'Yes', estimated population exposed to risks > 10 in a million for a 30-year exposure, or an HI > 1

2. Risk Reduction Required? Yes No

R..... 4/30/2015

Appendix C

HRA Review Check List

The check list contained here is used by SCAQMD staff to standardize the review of HRAs. It is being provided to assist facilities and consultants in their HRA preparation.

Facility Name:**Facility ID:****Street Address:****City:****Zip Code:****HRA Consultant:****Reviewer:****Dispersion Modeling**

1. Control Pathway

a. "Regulatory Default Option" checked? **Yes No**

i) If No, explain why: _____

b. Urban Option

i) "Apply All Sources" checked? **Yes No**ii) "Population" from the latest Census data is added for county? **Yes No**iii) "Roughness Length" = 1.0 (default value) **Yes No**

2. Source Pathways

a. Sources

i) Check if source list is consistent with following documents:

- Base Year AER source list? **Yes No**
- District equipment list (permit list)? **Yes No**

ii) "Source Type" determined properly? **Yes No**iii) "Volume/Area source dimensions" are reasonable? **Yes No**iv) "UTMs" are consistent with Plot Plan? **Yes No**v) "Elevation" of source(s) are imported from AERMAP output file? **Yes No**vi) Adequate "Emission Rates" used? (default 1 g/s) **Yes No**vii) "Release Heights" reasonable? **Yes No**viii) Stack parameters are consistent with those provided in the report **Yes No**ix) Accurate and sufficient details entered for every source? **Yes No**

b. Variable Emissions

i) Default emission rate used? (default: 1 g/s, 24 hrs/day, 365 days/yr) **Yes No**ii) If not, appropriate emission rate factors are used? (Table 2) **Yes No**

c. Buildings

i) All surrounding buildings included? **Yes No**ii) Tier Heights and corner points reasonable? **Yes No**

- If No in any, _

3. Receptors

a. Grid receptors

- i) Included? (should be “Yes”) Yes No
- ii) Spacing? (should be no greater than 100 meters) Yes No
 - Assumed spacing _____ meters
- iii) Elevations included? (should be “Yes”) Yes No
- iv) Is gridded area sufficient to cover acceptable risk levels? Yes No

b. Property boundary receptors

- i) Included? (should be “Yes”) Yes No
- ii) Spacing? (should follow guidance in Table 3) Yes No
 - Assumed spacing _____ meters
- iii) Elevations included (should be “Yes”) Yes No

c. Sensitive receptors

- i) Included? (should be “Yes” if cancer risks >1 in a million) Yes No
- ii) Elevation included? (should be “Yes”) Yes No
- iii) Verified from review of Google Earth or other source Yes No

d. Census block receptors

- i) Included? (should be “Yes” if cancer risks >1 in a million) Yes No
- ii) Elevation included? (should be “Yes”) Yes No

e. Pathway receptors included? (should be “No”) Yes No

4. Meteorology Pathway (The latest met data files shall be used.)

- a. Surface Met Data File: _____ .sfc
- b. Profile Met Data File: _____ .pfl
- c. Base Elevation of Met Station (PROFBASE): _____ meters
- d. Does the Met Station reflect prevailing meteorological conditions (ex., prevailing winds), surrounding land use, and topography that exists at the source?
This is not always the closest Met Station (Table 1) Yes No

5. Terrain Option

- a. (Step 1) is Anchor location correct? Yes No
- b. (Step 2) is appropriate DEM/NED data file linked? Yes No

- i) DEM/NED file used: _____
- ii) Is (Are) the DEM/NED file(s) covering sufficient area? **Yes** **No** _____
- c. (Step 3) independently ran AERMAP? **Yes** **No** _____
6. Building Downwash
7. Independently ran BPIP Prime? **Yes** **No** _____ Duplication of AERMOD Results
- a. Independently ran AERMOD? **Yes** **No** _____
- b. Average χ/Q first high values for each source group reproduced? **Yes** **No** _____
(not required; useful if diagnosing discrepancies)
- c. Max 1-hour χ/Q first high values for each source group reproduced? **Yes** **No** _____
(not required; useful if diagnosing discrepancies)
8. All plt files are generated successfully? **Yes** **No** _____

Site Visit

- Site visit conducted? **Yes** **No** _____
 - a. If Yes, **Date** __ **Time** __,
 - b. Facility Contact: _____
 - c. SCAQMD Staff: _____

Program Used

1. Facility submittal package is processed by the latest version of HARP? **Yes** **No** _____
- a. If NOT, name software used: _____
2. This review is performed using the latest version of HARP? **Yes** **No** _____
- a. If NOT, name software used: _____

General Comments

Appendix D

Elements of a Risk Reduction Plan

INTRODUCTION

Facilities with an approved HRA with health risks greater than or equal to the Action Risk Levels as identified in SCAQMD Rule 1402 are required to submit an RRP within the specified timeframes for each specific category as specified in the Rule. Facilities participating in the Voluntary Risk Reduction Program under Rule 1402 should follow the *Guidelines for Participating in the Rule 1402 Voluntary Risk Reduction Program* that are available online.³¹ The owner or operator is responsible for preparing a RRP that identifies the risk reduction measures that should be implemented in order to reduce the impact of the total facility emissions below the Action Risk Levels.

ELEMENTS OF A RISK REDUCTION PLAN

1. The name, address, and SCAQMD facility identification number, and Standard Industrial Code (SIC) and North American Industry Classification System (NAICS) codes of the facility;
2. A facility risk characterization which includes an updated ATIR and HRA, if the risk due to total facility emissions has increased above or decreased below the levels indicated in the previously approved HRA;
3. Identification of each source from which risk needs to be reduced in order to achieve a risk below Rule 1402 Action Risk Levels;
4. For each source identified in subparagraph (3), an evaluation of the risk reduction measures available to the owner or operator, including emission and risk reduction potential, and time necessary for implementation;
 - An updated ATIR and HRA if total facility risks are different than what was approved in the previously approved HRA.
5. Specification of the risk reduction measures that shall be implemented by the owner or operator to comply with the requirements of Rule 1402, subdivision (i) to achieve the Action Risk Level or the lowest achievable level;
6. A schedule for implementing the specified risk reduction measures as quickly as feasible. The schedule shall include the submittal of all necessary applications for permits to construct or modify within 180 days of approval of the RRP, or in accordance with another schedule subject to approval by the Executive Officer, and specify the dates for other increments of progress associated with implementation of the risk reduction measures;
7. If requesting a time extension, the plan must also include the following information:
 - A description of the risk reduction measure(s) for which a time extension is needed;
 - The reason(s) a time extension is needed;
 - Progress in implementing risk reduction measures in the plan;
 - For RRP, estimated health risks at the time of the extension request and at the end

³¹ http://www.aqmd.gov/docs/default-source/planning/risk-assessment/vrrp_guidelines.pdf?sfvrsn=4

of the risk reduction period; and the length of time extension requested.

The Executive Officer will review the request for the time extension and will approve or reject the time extension based on the following criteria:

- The facility-wide health risk is below the Significant Risk Level at the time of submittal of the time extension request;
 - The owner or operator provides sufficient details identifying the reason(s) a time extension is needed that demonstrates to the Executive Officer that there are specific circumstances beyond the control of the owner or operator that necessitate additional time to complete implementation of the plan. Such a demonstration may include, but is not limited to, providing detailed schedules, engineering designs, construction plans, permit applications, purchase orders, economic burden, and technical infeasibility; and
 - The time extension will not result in an unreasonable risk to public health.
8. An estimation of the residual health risk after implementation of the specified risk reduction measures; and
 9. Proof of certification of the RRP as meeting all requirements by an individual who is officially responsible for the processes and operations of the facility. The person who makes this certification must be one of the following:
 - An engineer who is registered as a professional engineer pursuant to Business and Professional Code section 6762.
 - An individual who is responsible for the operations and processes of the facility.
 - An environmental assessor registered pursuant to Health and Safety Code section 25570.3.

Appendix E
Elements of a Risk Reduction Progress Report

INTRODUCTION

Facilities with an approved RRP or VRRP as identified in SCAQMD Rule 1402 are required to submit an **Annual Progress Report** every twelve months as long as their total facility risk meets or exceeds the Rule 1402 Action or Significance Risk Levels.

ELEMENTS OF A RISK REDUCTION PROGRESS REPORT

1. A description of any increases or decreases in emissions of toxic air contaminants that have occurred at the facility, including a description of any associated permits that were subject to Rule 1401, since approval of the RRP or VRRP;
2. The increments of progress (interim facility risks) achieved in implementing the risk reduction measures specified in the RRP or VRRP. The interim facility risk should represent the previous twelve month period;
3. Submittal dates of all applicable permit application(s), the status of the application(s), the name of the regulatory agency, and the corresponding permit number(s);
4. A schedule indicating dates for future increments of progress; and
5. Identification of any increments of progress that will be achieved later than specified in the plan and the reason for achieving the increments late.

Appendix F

Elements of Early Action Reduction Plans for Potentially High Risk Level Facilities

INTRODUCTION

Facilities designated as a Potentially High Risk Level Facility by the Executive Officer, as identified in SCAQMD Rule 1402, are required to submit an Early Action Reduction Plan within 90 days of notification of such designation. The purpose of the Early Action Reduction Plan is to expedite risk reduction to mitigate the elevated health risk to protect public health.

ELEMENTS OF AN EARLY ACTION REDUCTION PLANS FOR POTENTIALLY HIGH RISK LEVEL FACILITIES

Within 90 days of the date of notification by the Executive Officer that the facility is a Potentially High Risk Level Facility, an owner or operator shall submit an Early Action Reduction Plan that identifies a list of measures that can be implemented immediately to reduce the facility-wide health risk. The Early Action Reduction Plan shall include:

1. The name, address, and SCAQMD Facility ID number;
2. Identification of device(s) or process(es) that are the key health risk driver(s);
3. Risk reduction measure(s) that can be implemented by the owner or operator that includes but are not limited to procedural changes, process changes, physical modifications, and curtailments; and
4. A schedule for implementing the specified risk reduction measures.

Appendix G
List of Acronyms and Abbreviations

List of Acronyms and Abbreviations

Acronym	Description
AB 2588	Air Toxics “Hot Spots” Information and Assessment Act
AER	Annual Emissions Reporting
ATIR	Air Toxics Inventory Report
CARB	California Air Resources Board
CAS	Chemical Abstracts Service
DICE	Diesel Internal Combustion Engine
EIM	Emission Inventory Module
HARP	Hotspots Analysis and Reporting Program
HI	Hazard Index
HRA	Health Risk Assessment
MEIR	Maximum Exposed Individual Resident
MEIW	Maximum Exposed Individual Worker
MICR	Maximum Individual Cancer Risk
NAICS	North American Industry Classification System
ODC	Ozone Depleting Compound
OEHHA	Office of Environmental Health Hazard Assessment
PMI	Point of Maximum Impact
RRP	Risk Reduction Plan
SB 1731	Facility Air Toxic Contaminant Risk Audit and Reduction Plan
SIC	Standard Industrial Code
SRP	(California) Scientific Review Panel
SCAQMD	South Coast Air Quality Management District
U.S. EPA	United States Environmental Protection Agency
UTM	Universal Transverse Mercator
VRRP	Voluntary Risk Reduction Plan
WAF	Worker Adjustment Factor
WGS84	World Geodetic System 1984

ATTACHMENT 4



South Coast Air Quality Management District

**Guidelines for Participating in the Rule 1402
Voluntary Risk Reduction Program**

July 2018

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1. INTRODUCTION

The Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588) established a statewide program to inventory air toxics emissions from individual facilities as well as requirements for risk assessment, public notification of potential health risks, and risk reduction. South Coast Air Quality Management District (SCAQMD) Rule 1402 – Control of Toxic Air Contaminants from Existing Sources (Rule 1402)¹ implements various aspects of the AB 2588 program and includes public notification and risk reduction requirements for facilities that are above set thresholds.

Rule 1402 includes a provision to allow facilities to participate in the Voluntary Risk Reduction Program. The Voluntary Risk Reduction Program was developed based on comments from some industry representatives that wanted the opportunity to voluntarily reduce their health risk beyond the Action Risk Level to below the Notification Risk Level in lieu of the standard process. The Voluntary Risk Reduction Program is an alternative to complying with the traditional AB 2588 program and Rule 1402 approach and provides qualifying facilities an opportunity to reduce health risks below the Notification Risk Level with a Modified Public Notification approach that does not require distribution of individual letters and public meetings. The Modified Public Notification will be placed on SCAQMD's website and in the AB 2588 Annual Report in lieu of traditional Public Notification, as described in SCAQMD's "Public Notification Procedures for Facilities Under the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588) and Rule 1402").² Compliance with AB 2588 and Rule 1402 Public Notification requirements does not replace Proposition 65 and its Public Notification requirements or any other regulatory requirements. This Program will achieve risk reductions both sooner and beyond what is required in the traditional Rule 1402 process as it focuses on implementation of risk reduction measures immediately.

Under Rule 1402, facilities that meet the eligibility requirements and elect to participate in the Voluntary Risk Reduction Program must submit a Voluntary Risk Reduction Plan (VRRP). The VRRP identifies the risk reduction measures that a facility will implement to achieve risk reductions below the Voluntary Risk Threshold. The "Guidelines for Participating in the Rule 1402 Voluntary Risk Reduction Program" specify the guidelines for preparing, approving, and demonstrating implementation of the VRRP:

1. The procedures an owner or operator must follow in preparing a VRRP pursuant to (h)(2) of Rule 1402;
2. The information that the Executive Officer will use when approving or rejecting the VRRP pursuant to (h)(3) of Rule 1402; and
3. The procedures an owner or operator must follow in preparing a Final Implementation Report for the VRRP pursuant to (j)(2) of Rule 1402.

2. PREPARING A VOLUNTARY RISK REDUCTION PLAN

The owner or operator is responsible for preparing a VRRP that identifies the risk reduction measures that shall be implemented in order to reduce the impact of the total facility emissions

¹ <http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1402.pdf?sfvrsn=4>

² http://www.aqmd.gov/docs/default-source/planning/risk-assessment/pn_procedures.pdf

below the Voluntary Risk Threshold. Rule 1402 defines the Voluntary Risk Threshold as a Maximum Individual Cancer Risk (MICR) of ten in one million (10×10^{-6}), a total acute or chronic Hazard Index (HI) of one (1.0) for any target organ system at any receptor location, and the more stringent of either the National Ambient Air Quality Standard (NAAQS) for lead or applicable ambient lead concentration limit in a SCAQMD rule. Only those risk reduction measures that are needed to reduce facility risks below the Voluntary Risk Threshold need to be identified in the VRRP.

Emissions that are routine and predictable must be included, including testing of emergency Internal Combustion Engines (ICE). Emissions from actual emergency use is not considered routine and predictable and do not need to be included. Portable diesel ICEs that are used primarily on-site and for a single purpose or used in a fixed location for most of its life are considered “stationary” and should be included for AB 2588 program purposes.

The facility information and release, device, process, and emissions data must be provided in an Emissions Inventory Module³ (EIM) database using the Universal Transverse Mercator (UTM) coordinate system with the World Geodetic System (WGS84) datum. While actual information is stored in an associated Microsoft Access database file, the EIM program should be used to verify the accuracy of the entries for two reasons: 1. much of the data is relational and data integrity is more easily verified using the EIM program; 2. data is entered directly into the tables and may not meet the minimum validation requirements when using the EIM program for entry. The minimum information required in the EIM file is shown in Appendix A.

The Voluntary Risk Reduction Plan shall include:

2.1 Facility Information

- Facility Name
- Base Reporting Year as identified by SCAQMD staff
- SCAQMD Facility Identification Number
- Standard Industrial Classification (SIC) and North American Industry Classification System (NAICS) Numbers
- Facility Origin (i.e., address and UTM 11 coordinates in WGS84 in kilometers)
- Facility Contact
 - Name
 - Title
 - Phone Number
 - Address
 - E-mail address
- Facility plot plan
 - Property boundaries (in relative meters to the Facility Origin)
 - Distance scale
 - Building locations and boundaries (in relative meters to the Facility Origin)
 - Building heights (in meters, for building downwash calculations)

³ <https://www.arb.ca.gov/toxics/harp/harp.htm>

- Source locations including elevations (in UTM 11 coordinates in WGS84 in kilometers)
- Surrounding land use map (e.g., the local city's zoning map)
 - 0.5 mile radius from property boundary
 - Distance scale
 - Identification of closest sensitive receptor (e.g., residence, school, etc.)
 - Identification of closest worker receptor
- Process flow diagram

2.2 Current Facility Risk Characterization

- Release Data: All sources and source names must be included. Refer to Release Information Entry screenshot in Appendix A for required information.
 - Point Sources:
 - Stack locations (in UTM 11 coordinates in WGS84 in kilometers) including elevations (ft)
 - Stack diameters (ft), gas exit velocities (ft/min), gas flow rates (ft³/min), gas exit temperatures (F), and release heights (ft)
 - Stack release type (vertical, horizontal, or rain cap). If the rain cap option is used, please indicate this and include both actual and virtual stack parameters.
 - Fugitive Sources: Includes Volume, Area, and Open Pit sources
 - Source locations (in UTM 11 coordinates in WGS84 in kilometers)
 - Source dimensions and heights (ft)
 - Volume sources: Include initial lateral and vertical dimensions (ft)
 - Area source: initial vertical dimensions, square or rectangular dimensions (ft)
 - Open pits: volume of the open pit (ft³)
 - Other types of fugitive sources: describe and provide applicable dimensions and data
 - Calculations for initial air dispersion factors (e.g., σ_y and σ_z), if applicable
- Device Data: All devices and equipment subject to the AB 2588 program or SCAQMD Rule 1402 must be included by their application number. Refer to Device Information Entry screenshot in Appendix A for required information.
 - All permitted devices
 - Any existing devices operating under an open application
 - Any devices exempt from permitting must be listed by the SCAQMD Rule exempting them
 - Any devices with zero emissions must be included. The Process Rates for these devices may be set as zero to reflect zero emissions
 - Any other unpermitted operations, activities, equipment, or emissions that are still subject to the AB 2588 program or Rule 1402
 - Device IDs, Device Names, Permit IDs (if applicable), Number of Devices, Output Capacities, Size, Units Code, and Type Code
- Process Data: All processes producing emissions. Refer to Process Information Entry

screenshot in Appendix A for required information.

- Device IDs, Process IDs, Process Description, Release ID, SCC Number, SCC Units, Process Rate (SCC Units/Yr), Maximum Design Rate (SCC Units/hr), Maximum Hourly Process Rate (SCC Units/hr), Operating Hours Per Day, and Operating Days Per Week
 - Emission Data: All Toxic Air Contaminants (TACs) in the Office of Environmental Health Hazard Assessment (OEHHA) Guidelines Appendix A-I must be included and quantified in the inventory report.⁴ Refer to Emission Information Entry screenshot in Appendix A for required information. Facility total emission rate by substance and Process ID must include the following information:
 - Substance name and Chemical Abstract Service (CAS) Number
 - Annual average emission for each substance (lb/yr)
 - Maximum one-hour emissions for each substance (lb/hr)
 - Device ID, Process ID
 - Control Devices: Primary Control (CNTL1), Secondary Control, Control Efficiency (Percent)
 - Emission Factors: Uncontrolled EMS Factor, EMS Factor
 - Receptors: Refer to Receptor Information Entry screenshot in Appendix A for required information.
 - Coarse grid used to define the zone of impact
 - Refined grid used to identify the point of maximum impact and maximum exposed individuals
 - All appropriate receptors (i.e. residential, commercial, or sensitive)
 - Closest sensitive receptor (e.g. residence, school, etc.)
 - Closest worker receptor
 - Nearest residential receptor based on prevailing wind
 - Nearest worker receptor based on prevailing wind
- Note for prevailing wind receptor:** Using the wind rose from the representative SCAQMD meteorological station, identify the prevailing wind (dominant wind direction). Then identify the nearest receptor following the prevailing wind (dominant wind direction).

2.3 Proposed Facility Risk Characterization

- Release Data: List any changes from the Current Facility Risk Characterization such as new or removed sources and changed source parameters. If there are no changes, please state so.
- Device Data: List any changes from the Current Facility Risk Characterization such as device removals or additions along with Permit IDs. If there are no changes, please state so.
- Process Data: List any changes from the Current Facility Risk Characterization. If there are no changes, please state so.

⁴ <https://oehha.ca.gov/air/crnrr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0>

- Emission Data: List any changes from the Current Facility Risk Characterization by TAC name and CAS Number. If there are no changes, please state so.

2.4 Supplementary Information

- A description of verifiable risk reduction measures and estimated emission reductions or efficiencies.
- A description of how the risk reduction measures will be enforced, such as through a new or modified SCAQMD permit or compliance plan. Proposed risk reduction measures, if approved, may become enforceable.
- A description of how the estimated emission reductions or efficiency will be demonstrated and maintained, such as through a source test, manufacturers' data, etc.
- Permit numbers associated with sources or processes to be reduced, if applicable.
- Schedule for implementing the specified risk reduction measures, including dates for increments of progress, submittal dates for application for permits, purchases of equipment, source tests, and commissioning of equipment.
- Anticipated increases or decreases in facility emissions, by TAC name and CAS Number, for each device and process with verifiable risk reduction measures.

2.5 Final Submittal

- EIM and associated files with Facility Information and Current Facility Risk Characterization data. The latest approved version of EIM can be downloaded from California Air Resources Board's (CARB) Hotspots Analysis and Reporting Program (HARP).⁵
- EIM and associated files with Facility Information and Proposed Facility Risk Characterization data.
- Any supplementary information in electronic format discussing facility information, VRRP proposals, EIM data, and any missing information that cannot be entered into the EIM.
- Supporting documentation for emission factors, such as source test reports and approval letters, CARB's or the United States Environmental Protection Agency's (U.S. EPA) reference publications, Safety Data Sheets (SDS), technical literature, etc.
- Emission Factors Reference Sources Table.⁶ This table should list the reference sources for each emission factor used. This can include reference sources such as AP-42, SDSs, source testing, or air quality monitoring data.
- Dispersion modeling input and output files (all AERMOD and BPIP files used in the VRRP including terrain data. All meteorological data files including any AERMET files if default SCAQMD meteorological data is not used.)
- Air monitoring data, if applicable.

⁵ <https://www.arb.ca.gov/toxics/harp/harp.htm>

⁶ Template available here: <http://www.aqmd.gov/home/rules-compliance/compliance/toxic-hot-spots-ab-2588>

The Voluntary Risk Reduction Plan may also include optional information as additional proof that the risk reduction measures identified will reduce the impact of the total facility emissions below the Voluntary Risk Threshold. Optional information may include:

- Pre-approved meteorological file, if SCAQMD default meteorological file is not used; and
- United States Geological Survey Digital Elevation Model Data.

Table 1 lists the files which must be included in the VRRP submittal.

Table 1: Files that must be provided for Facility Risk Characterizations

File Type	Notes
Emission Inventory Input	All files in CARB’s Emissions Inventory Module format.
Emission Inventory Output	
Emission Calculations and/or Dispersion Modeling (if applicable)	Provided in electronic format (e.g., Excel) and documented references (i.e. sample calculations).
Source Tests	Only SCAQMD-approved source tests can be used. SCAQMD approval must be included in submittal.
Air Monitoring Data	Any monitoring data used shall be provided.

3. APPROVAL OF THE VOLUNTARY RISK REDUCTION PLAN

Within 30 days of receipt, the Executive Officer or designee will conduct an initial review of the VRRP and confirm receipt. The Executive Officer or designee will approve or reject the Voluntary Risk Reduction Plan based on whether it meets the requirements outlined above, the information provided is complete and accurate, and the ability of the proposed Voluntary Risk Reduction Plan to verifiably reduce the impact of total facility risk below the Voluntary Risk Threshold as quickly as feasible, but by no later than two and half years from Voluntary Risk Reduction Plan approval. If the Voluntary Risk Reduction Plan is rejected, the facility has 30 days to correct all identified deficiencies and resubmit. If the revised plan is rejected, the facility has one more opportunity to fix the identified deficiencies. If the second revised plan is rejected, then the facility will not be allowed to participate in the Voluntary Risk Reduction program and the facility will be subject to the standard AB 2588 pathway. The denial will act as a notification to prepare an Air Toxics Inventory Report (ATIR) and Health Risk Assessment (HRA) within 90 days.

Emission reductions or control efficiencies must be verifiable to be considered as a risk reduction measure in a Voluntary Risk Reduction Plan. Verifiable emission reductions or control efficiencies are those which are permanent, can be sustained, and must be enforceable through permit conditions or compliance plans. Emission reductions or control efficiencies must be demonstrable through a source test, manufacturers’ data, or other mechanism. Each risk reduction measure shall be implemented by the date specified in the approved Voluntary Risk Reduction Plan. Rule 1402 includes provisions for modifying Voluntary Risk Reduction Plans and extending implementation dates, if needed.

4. VOLUNTARY RISK THRESHOLD

The Voluntary Risk Threshold is based on the concept of the ATIR. SCAQMD staff will run facility VRRP information through the latest approved version of California Air Resources Board's Hotspots Analysis and Reporting Program (HARP) or equivalent and compare the result to the Voluntary Risk Threshold pursuant to Rule 1402 paragraph (c)(24).

5. VOLUNTARY RISK REDUCTION PLAN IMPLEMENTATION

Risk reduction measures identified in the Voluntary Risk Reduction Plan must be completed within the designated schedule and be verifiable and enforceable by permit condition or compliance plan. With Executive Officer approval, facilities may modify or request an extension to the Voluntary Risk Reduction Plan pursuant to (k)(2) and (l) of Rule 1402, respectively. Facilities failing to implement their Voluntary Risk Reduction Plan are in violation of Rule 1402 and subject to daily penalties. Facilities that cannot achieve compliance immediately may seek a variance from the SCAQMD Hearing Board, which may issue one depending on whether statutorily required findings can be made (refer to Rule 515 – Findings and Decision).

6. FINAL IMPLEMENTATION REPORT

The owner or operator shall submit a final implementation report pursuant to Rule 1402 paragraph (j)(2) once all measures listed in the Voluntary Risk Reduction Plan are fully implemented. The final implementation report demonstrates that the measures in the Voluntary Risk Reduction Plan have been completed, risk reduction measures have been verified, and therefore, the facility is below the Voluntary Risk Threshold. Approval of the final implementation report by the Executive Officer or designee acknowledges compliance with Rule 1402 requirements and that no further action is necessary.

The final implementation report shall include, at a minimum, all of the following:

- The name, address, and SCAQMD facility identification number;
- The approved Voluntary Risk Reduction Plan; and
- Proof and verification the operator implemented the risk reduction measures in the approved Voluntary Risk Reduction Plan.

Proof would include enforceable permit conditions or compliance plans. Verification of emission reductions include, but are not limited to, specifications in the SCAQMD permit issued to the facility, a surrender of the existing SCAQMD permit(s), or reductions as required by SCAQMD rule(s). Letters of intent or internal memos mandating new company policy are not considered verifiable emission reductions. Verification of pollution control equipment which have been installed and are now in operation, includes but is not limited to, the source test protocol, final report, and all documents relating to the results.

APPENDIX A – Required Entries to EIM

1. Facility Information Entry

The screenshot shows the 'Facility Data Entry Screen' for editing facility ID: 999999 | SCAQMD | Year: 2017. The interface includes a menu bar (File, Edit, Previous Record, Next Record, Go To, Settings, Help) and a left-hand navigation tree. The main content area is titled 'Facility Identification' and contains several data entry sections:

- Facility Name (FNAME):** SCAQMD
- Composite Record Key Fields:**
 - Reporting Year: 2017
 - Facility ID (FACID): 999999
 - County (CO): LOS ANGELES
 - Air Basin (AB): SOUTH COAST
 - District (DIS): SOUTH COAST AQMD
- Facility Sub-county Identifier (FACSUBCO):** (if available)
- Standard Industrial Classification (SIC):**
 - SIC: 9511
 - Description: AIR WATER & SOLID WASTE MANAG
- North American Industrial Code System (NAICS):**
 - NAICS: 92411
 - Description: Administration of Air and Water Resource and Solid Waste Mana
- EPA Facility Registry System ID (FRS_ID):** (empty)
- Special Project ID (GEOID):** 2017_19_SC_SC_999999

Fields highlighted with red boxes in the screenshot are: Facility Name (FNAME), Reporting Year, Facility ID (FACID), County (CO) ID, Air Basin (AB) ID, District (DIS) ID, SIC, and NAICS.

At the bottom, there is a 'Record Navigation' section showing 'Record 1 of 1' and a 'Save' button. A note states: 'Note: Fields in parentheses are from database'. A link for 'See CEIDARS Data Field Descriptions' is also present.

All fields shown with red outline on the EIM screenshot shown above must be completed with the exception of the last two fields (U.S. EPA Facility Registry System ID and Special Project ID). The data for the base Reporting Year must match the inventory year requested by SCAQMD for the facility.

Facility Data Entry Screen
 File Edit Previous Record Next Record Go To Settings Help
Editing Facility - ID: 999999 | SCAQMD | Year: 2017

Facility Address & Location

Facility Address

Street (FSTREET) 21865 COPLEY DR

City (FCITY) DIAMOND BAR

State (FSTATE) CA Zip (FZIP) 91765

Facility Location (Geographical Coordinates)

Coordinate System Type (COORD_SYS) UTM 11 (kilometers)

Datum WGS84 - World Geodetic System 1984

Spheroid WGS84 - World Geodetic System 1984

Zone 11

X (East) 423.28765 kilometers

Y (North) 3762.62788 kilometers

Method of Collecting Data (LOC_METH) 020

[See CEIDARS Data Field Descriptions](#) Save

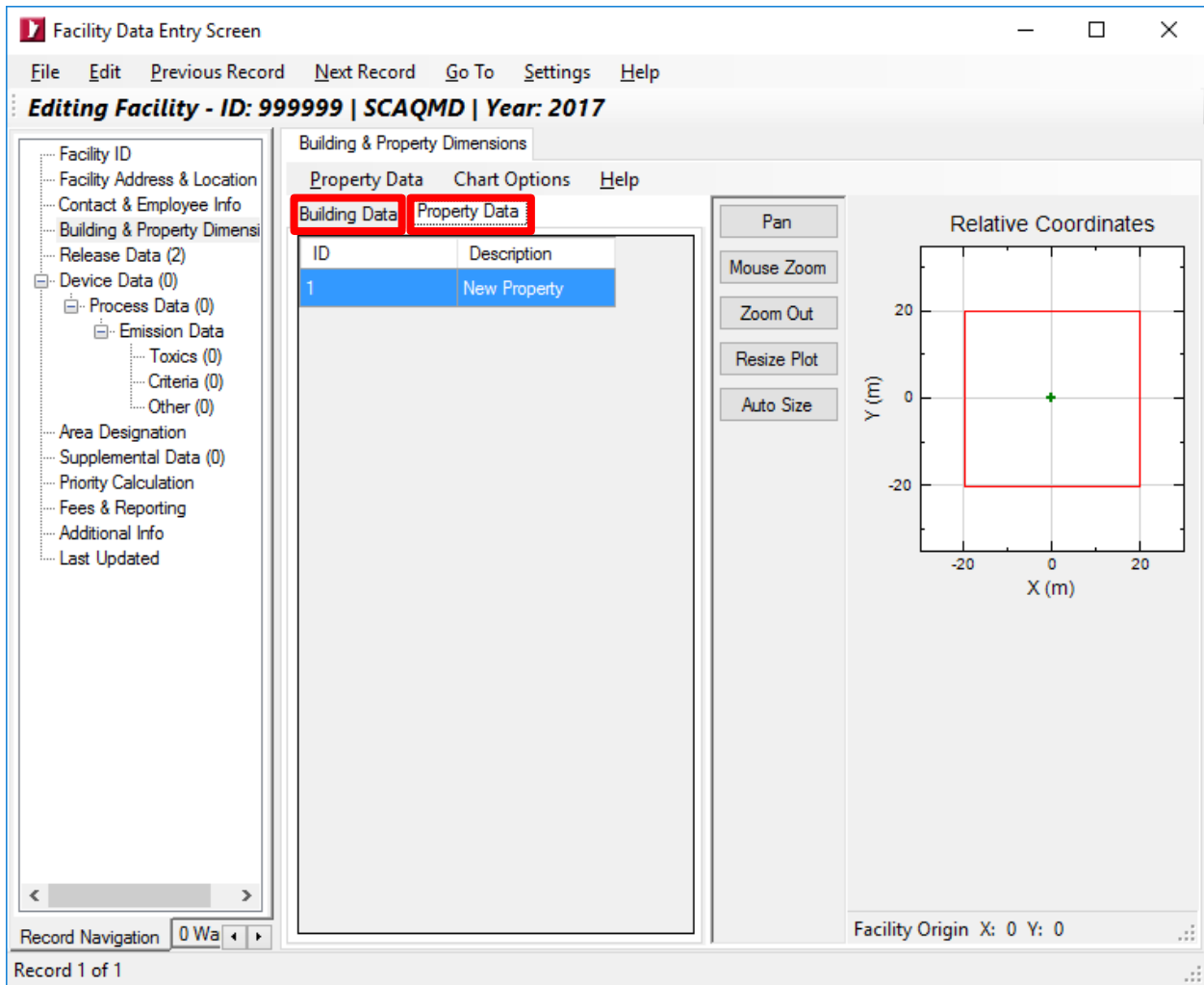
Record Navigation 0 Wa Record 1 of 1

All fields shown with red outline on the EIM screenshot shown above must be completed with the exception of the last field (method of collecting data). The coordinate system type, datum, spheroid and zone must match those shown above.

The screenshot shows a web-based data entry interface titled "Facility Data Entry Screen". The main heading is "Editing Facility - ID: 999999 | SCAQMD | Year: 2017". A left-hand navigation pane lists various data categories, with "Emission Data" expanded. The main content area is titled "Contact & Employee Information" and contains several input fields. Fields with red outlines are: "Number of Employees (NEMP)" with value "700"; "Contact Person (PCONTACT)" with value "WAYNE NASTRI"; "Area Code (AREAC)" with an empty box; "Telephone Number (PHONE)" with an empty box; "Company Name (MNAME)" with value "SCAQMD"; "Address (MSTREET)" with value "21865 COPLEY DR"; "City (MCITY)" with value "DIAMOND BAR"; "State (MSTATE)" with value "CA"; "Zip (MZIP)" with value "91765"; and "Attention (MCONTACT)" with value "WAYNE NASTRI". A "Save" button is located at the bottom right. A "Record Navigation" bar at the bottom shows "Record 1 of 1".

Field Name	Value
Number of Employees (NEMP)	700
Contact Person (PCONTACT)	WAYNE NASTRI
Area Code (AREAC)	
Telephone Number (PHONE)	
Company Name (MNAME)	SCAQMD
Address (MSTREET)	21865 COPLEY DR
City (MCITY)	DIAMOND BAR
State (MSTATE)	CA
Zip (MZIP)	91765
Attention (MCONTACT)	WAYNE NASTRI

All fields shown with red outline on the EIM screenshot shown above must be completed.



The building locations and dimensions must be entered, along with the property locations and dimensions. The input should be verified against satellite imagery for correctness; this can be done by exporting the data as KML file and viewing in Google Earth.

2. Release Information Entry

All fields shown with red outline on the EIM screenshot shown above must be completed.

For **point sources**, additional mandatory information are: stack diameter, gas temperature, gas flow, and gas velocity must be completed.

For **volume sources**, additional mandatory information are: initial lateral and vertical dimensions.

For **area sources**, additional mandatory information are: initial vertical dimension, square or rectangular dimensions.

For **open pits**, additional information is the volume of the open pit.

3. Device Information Entry

The screenshot shows a web-based form titled "Device Information" with a close button in the top right corner. The form includes several sections:

- Navigation:** Buttons for Add, Save, Delete, Previous, Next, and Close.
- General Information:**
 - Last Update (DEVU_D): 12/2/2016 12:00:00 AM
 - Device ID (DEV): 100
 - Local name of this device (DEVNM): TANK 40 (highlighted with a red box)
 - Local Permit ID (PERID): (empty, highlighted with a red box)
 - Number of Devices (NUMDEV): (empty, highlighted with a red box)
 - Equip Confidential: (checkbox, highlighted with a red box)
- Equipment:**
 - Output Capacity (DEVCAP) (MW): (empty, highlighted with a red box)
 - Size (EQSIZE): (empty, highlighted with a red box)
 - Units Code (EQUNITC): (empty, highlighted with a red box)
 - Type Code (EQTYPEC): (empty, highlighted with a red box)
- Geographical Location:**
 - Sub-county Identifier: (dropdown menu)
 - Section (SECT): (dropdown menu)
 - Township: (two dropdown menus)
 - Range: (two dropdown menus)
- Reserve for District Use:**
 - DEVD1: (empty text box)
 - DEVD2: (empty text box)
- Comments:**
 - Comments on Device Information (District Option): (empty text area)
- Footer:**
 - [See CEIDARS Data Field Descriptions](#)
 - Record 1 of 929

All fields shown with red outline on the EIM screenshot shown above must be completed.

4. Process Information Entry

Process Information x

Add Save Delete Previous Next Tools Close

Identification and Description

Last Updated (PRUP_D) 11/15/2017 10:40:53 AM

Device ID (DEV) 1

Process ID (PROID) 1

Process Description (PRDESC) NEW PROCESS

Confidential N

Forecast N

Release ID (STK) 1

NAICS 92411 SIC to NAICS

Administration of Air and Water Resource and Solid Waste M:

Description

SIC 9511

AIR WATER & SOLID WASTE MANAG

SCC 10100602

EXTCOMB BOILER

REIC N/A

PRO Rate Origin Code (PRORIG)

Process Rate Reliability (PRREL)

Sulfur Context (S) (%)

PROD1 (district use only)

PROD2 (district use only)

Operating Hrs/Day (HPDY) 24

Operating Days/Wk (DPWK) 7

Operating Weeks per Year (WPYR)

Year of emission estimate (YREST)

Heat (HEAT) (MBtu/SCC unit)

Fuel ash content (ASH) (wt %)

Rates

SCC Units MILLION CUBIC FEET BURNED

Process Rate (PR) (SCC Units/Yr) 250

Maximum Design Rate (MAXD) (SCC Units/hr) 25

Date of Last Process Rate Update (PRUP) 11/15/2017 10:42:55 AM

Changed by Agency/Person (PRUPID) FC

Maximum Hourly Process Rate (MAXHR_PR) (SCC Units/hr) 2

Process Rate Output (OUTPUT) (MW-Hr)

Percent Annual Throughput by Month

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Uniform	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33

Comments on Process Information (District option)

Is Default

[See CEIDARS Data Field Descriptions](#)

Record 1 of 1

All fields shown with red outline on the EIM screenshot shown above must be completed.

5. Emission Information Entry

The screenshot shows the 'Emission Information' form with the following fields and values:

- Last Updated (EMSUP_D): 11/15/2017 10:44:21 AM
- Pollutant ID (POL): 50000
- Pollutant Name: Formaldehyde
- Device ID (DEV): 1
- Process ID (PROID): 1
- Control Devices:
 - Primary Control (CNTL1): [Red outline]
 - Secondary Control: [Red outline]
 - Control Efficiency (Percent): [Red outline]
 - Forecasted: []
- Emission Factors:
 - Uncontrolled EMS Factor: [Red outline]
 - EMS Factor (EMFACT): [Red outline]
 - EMS Factor Last Update: []
 - Reason for Change: []
 - Person Changing (EMFACUPID): []
 - EMS Fact Origin (EMORIG): []
 - EMS Factor Reliability (EMREL): []
- Emissions:
 - UnRec. EMS (UNREMS) (area tpy): []
 - Annual EMS (lbs/yr): [Red outline]
 - Hr Max EMS (lbs/hr): [Red outline]
 - Excess EMS (EXEMS): []
 - Potential: []
 - EMS Calc. Method (METH): []
- Fraction:
 - Calc. Frac. ROG, PM10: []
 - Frac. ROG, PM10: []
 - Calc. Frac. VOC, PM 2.5: []
 - Frac. VOC, PM 2.5: []
 - Dis. Frac. PM 1.0: []

Buttons: Add, Save, Delete, Previous, Next, Close, Load User-Defined Fractions, Calculate EMS from PM, Calculate EMS from PM10.

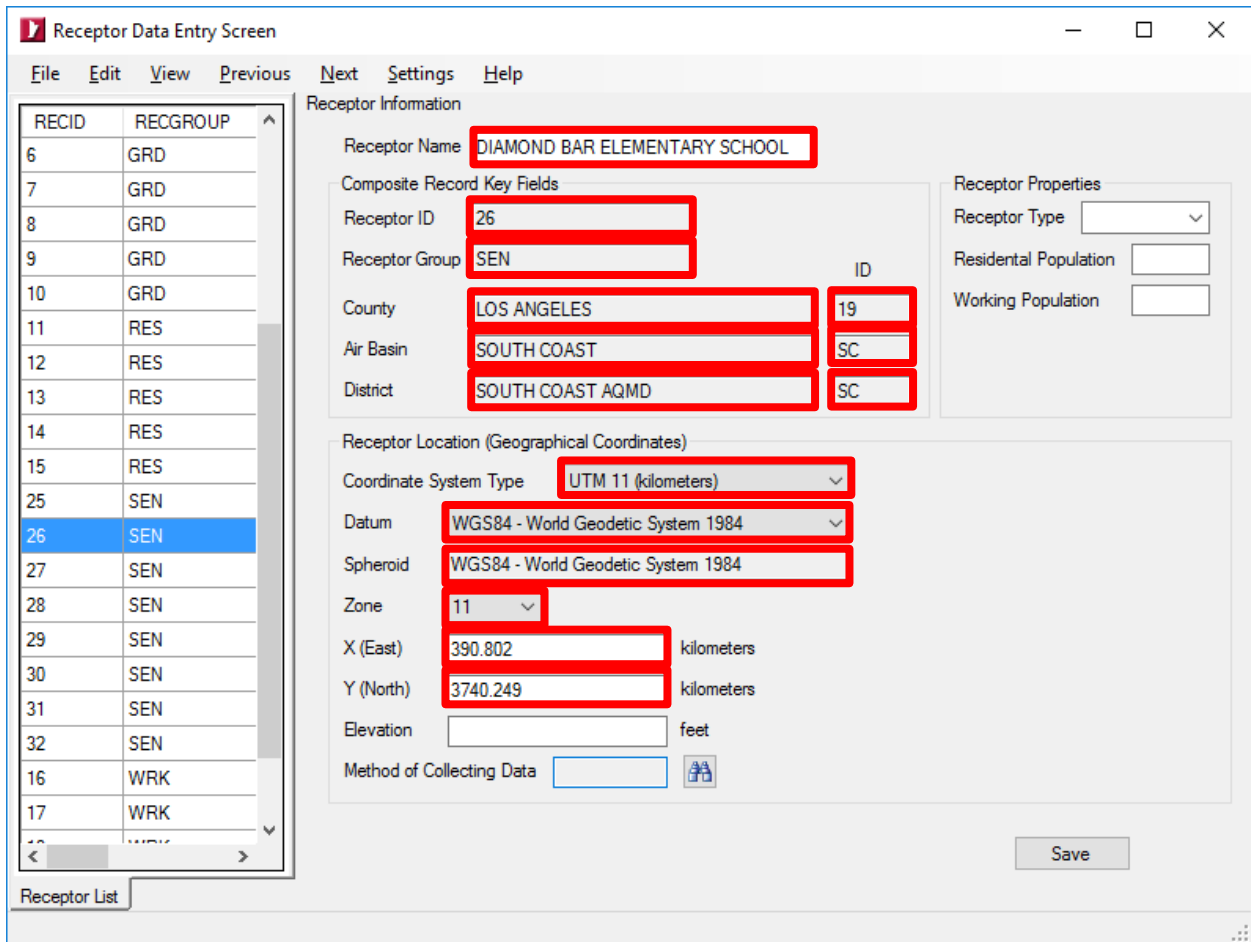
Memo: []

Record 1 of 1

[See CEIDARS Data Field Descriptions](#)

All fields shown with red outline on the EIM screenshot shown above must be completed.

6. Receptor Information Entry



All fields shown with red outline on the EIM screenshot shown above must be completed in order to provide the following information:

- The coarse grid used to define the zone of impact
- The refined grid used to identify the point of maximum impact and maximum exposed individuals
- Identify all appropriate receptors (i.e. residential, commercial, or sensitive)

Appendix B – ACRONYMS, ABBREVIATIONS AND REFERENCE OF TERMS

AB 2588	Air Toxics "Hot Spots" Information and Assessment Act of 1987
Action Risk Level	MICR of twenty-five in one million (25×10^{-6}), cancer burden of one half (0.5), a total acute or chronic HI of three (3.0) for any target organ system at any receptor location, or the National Ambient Air Quality Standard (NAAQS) for lead.
ATIR	Air Toxics Inventory Report
CAS Number	Chemical Abstract Service Number
HI	Hazard Index
HRA	Health Risk Assessment
MICR	Maximum Individual Cancer Risk
NAICS	North American Industry Classification System
Notification Risk Level	A maximum individual cancer risk of ten in one million (10×10^{-6}), a total acute or chronic HI of one (1.0) for any target organ system at any receptor location, or the more stringent of either the NAAQS for lead or applicable ambient lead concentration limit in a SCAQMD rule.
OEHHA	California Office of Environmental Health Hazard Assessment
RRP	Risk Reduction Plan
Rule 1402	SCAQMD Rule 1402 – Control of Toxic Air Contaminants from Existing Sources
SCAQMD	South Coast Air Quality Management District
SCC	Source Classification Code
SDS	Safety Data Sheet
SIC	Standard Industrial Classification
Significant Risk Level	A maximum individual cancer risk of one hundred in one million (100×10^{-6}) or a total acute or chronic HI of five (5.0) for any target organ system at any receptor location.
TAC	Toxic Air Contaminant

UTM	Universal Transverse Mercator
Voluntary Risk Threshold	A maximum individual cancer risk of ten in one million (10×10^{-6}), a total acute or chronic HI of one (1.0) for any target organ system at any receptor location, or the more stringent of either the NAAQS for lead or applicable ambient lead concentration limit in a SCAQMD rule.

**AB 2588 Toxic Hot Spots
2017 Annual Report
And
Updates to Guidance Documents**

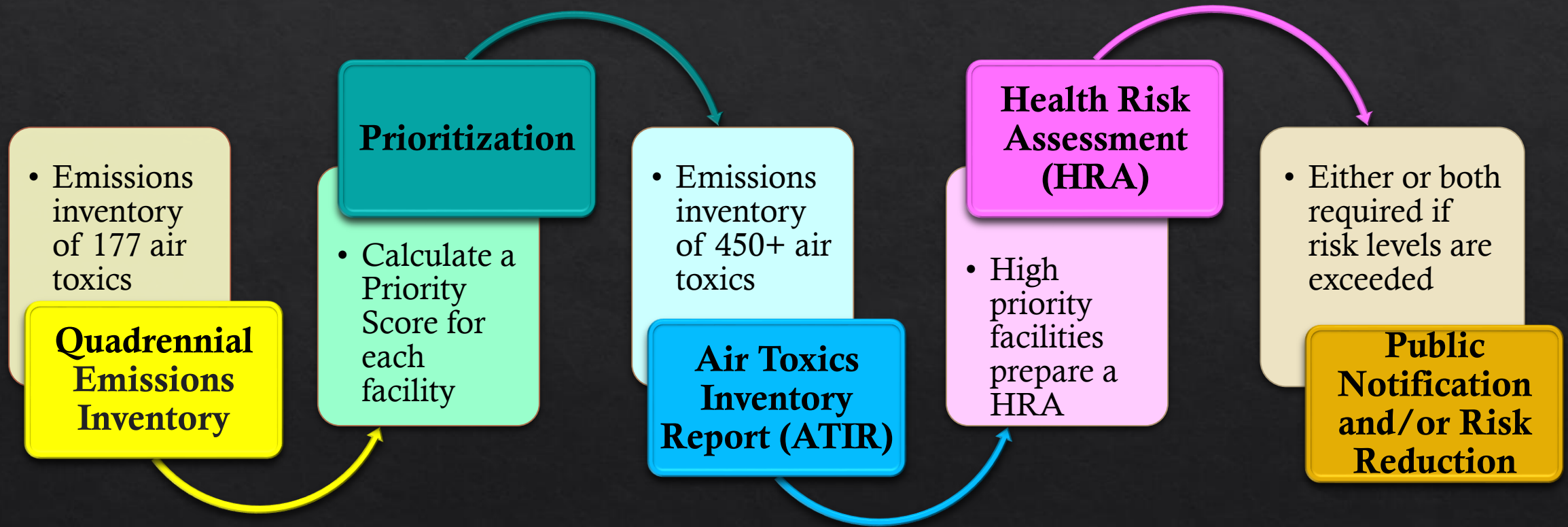
**Governing Board Meeting
July 6, 2018**



Introduction

- ◆ AB 2588 Program Annual Report summarizes
 - Activities implemented under AB2588 “Hot Spots Act” consistent with state law
 - Summarizes SCAQMD activities to reduce toxic air contaminants
 - Satisfies H&S Code §44363 requirement of a public hearing to present results of Annual Report
- ◆ Staff is also proposing updates to the following guidance documents:
 - Facility Prioritization Procedure for the AB 2588 Program
 - AB 2588 and Rule 1402 Supplemental Guidelines
 - Guidelines for Participating in the Rule 1402 Voluntary Risk Reduction Program

AB 2588 Traditional Process for 'Core' Facilities



Pathways for Facilities in Rule 1402

Traditional Approach

Facilities with cancer risks <100 per million

- Air Toxics Inventory Report
- Health Risk Assessment
- Risk Reduction Plan (if cancer risks >25 per million)

Voluntary Risk Reduction Program

Facilities with cancer risks <100 per million and approved HRA

- Air Toxics Inventory Report
- Voluntary Risk Reduction Plan committing to reduce cancer risks below 10 per million

Potentially High Risk Level

Facilities with cancer risks >100 per million

- Early Action Reduction Plan
- Air Toxics Inventory Report
- Health Risk Assessment
- Risk Reduction Plan

Summary of Rule 1402 Facility Actions in 2017



Revised Priority Score <10

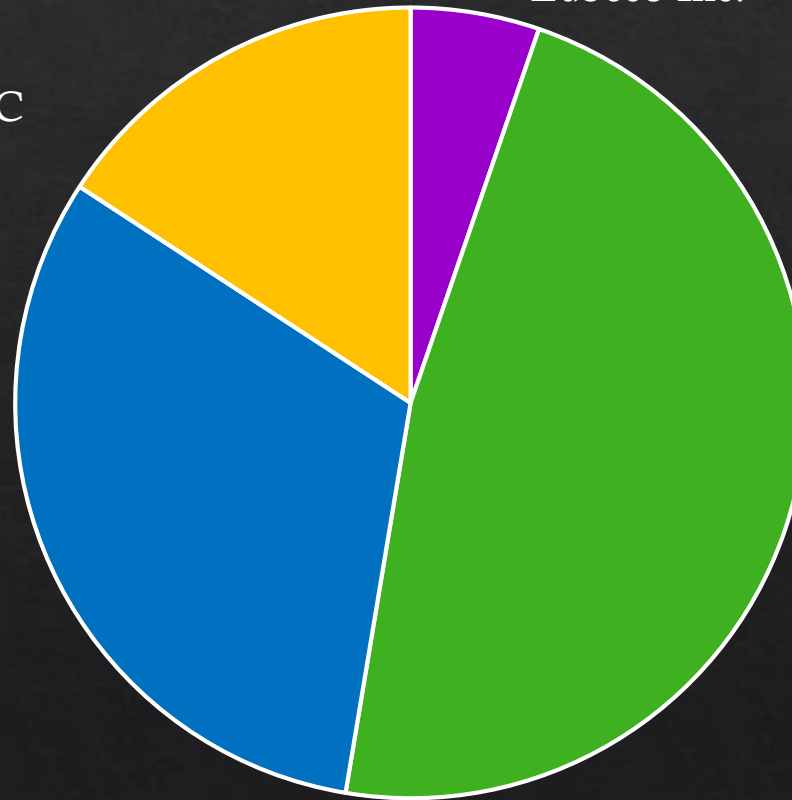
- Anadite Inc.
- LA City, Bureau of Streets
- Universal City Studios, LLC
- UC Irvine

Voluntary Risk Reduction Program

- OCSD, Fountain Valley
- OCSD, Huntington Beach
- Phillips 66, Carson Refinery
- Tesoro Calciner
- Torrance Refining Company
- Ultramar Valero Refinery

Potentially High Risk Level

- Lubeco Inc.

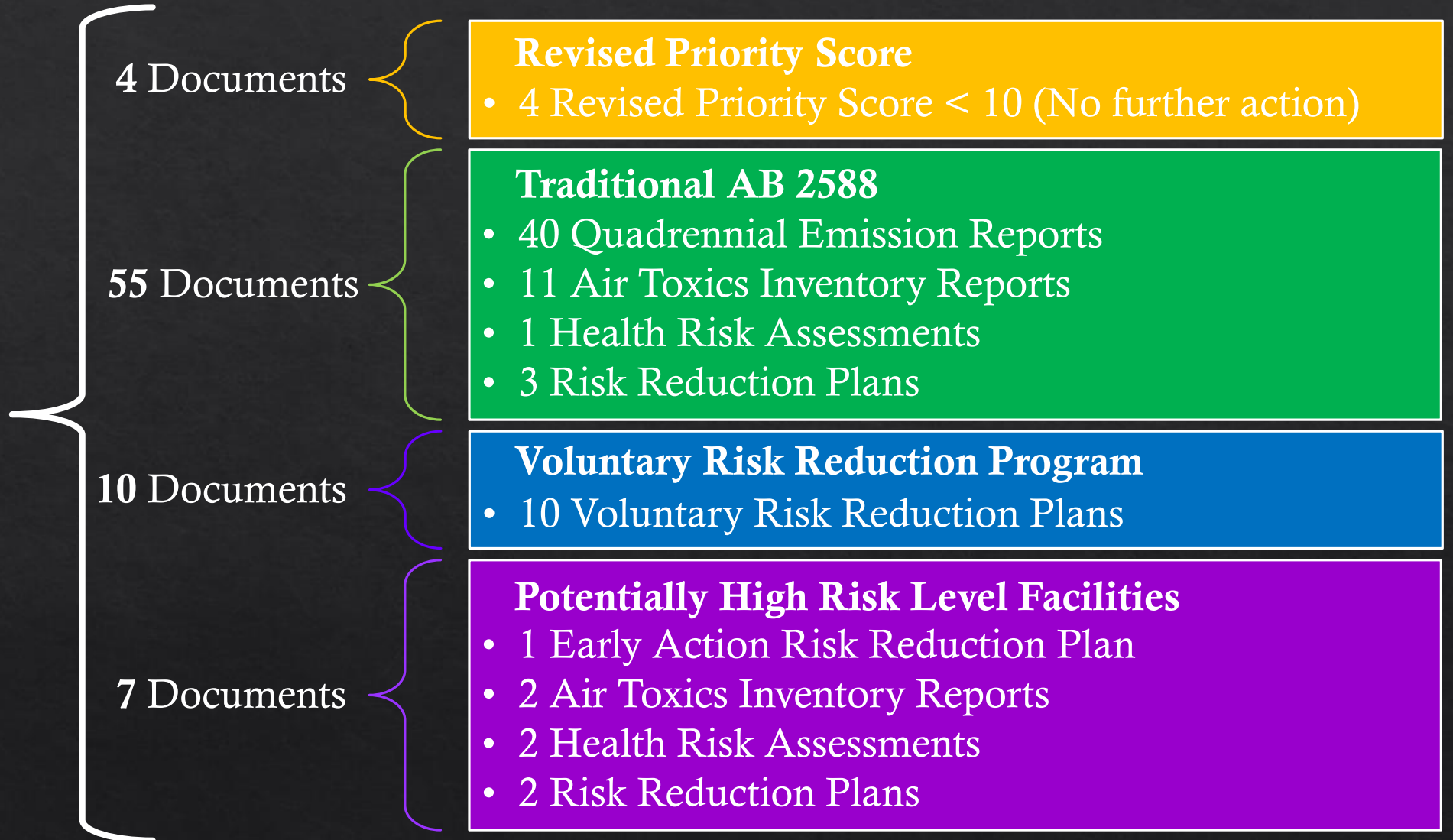


Traditional AB 2588 Program

- Boral Roofing, LLC
- Equilon Enterprises, LLC, Shell
- Glendale City Water & Power
- Matrix Oil Corp
- MM West Covina, LLC
- Phillips 66, Wilmington Refinery
- So Cal Gas, Playa del Rey Storage Facility
- So Cal Holding, LLC
- Triumph Processing, Inc.

Documents Reviewed In 2017

76
Documents
Reviewed



Total No. of Documents Reviewed in 2017 = 76*

* Some facilities could have multiple documents

Other Key Activities in 2017

Rulemaking



Adopted Rules
(1430 and 1466)

Amended 3
Rules (1401,
1420, and 1466)

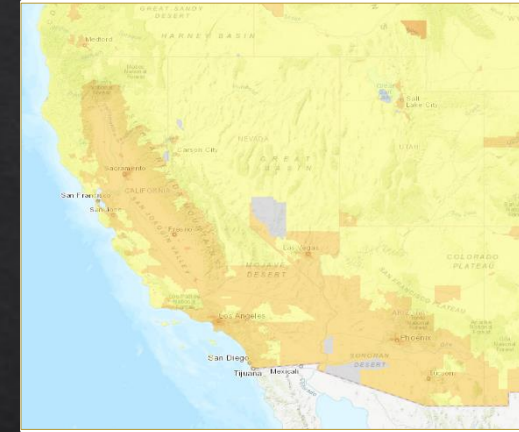
Special Monitoring



Continued air
monitoring in
Paramount

Began air
monitoring in
Compton

Other



Completed
review of the
2014 National
Air Toxics
Assessment
emissions data
from U.S. EPA

Updates to Guidance Documents

- **Facility Prioritization Procedure for the AB 2588 Program** – Incorporates the most recent meteorological data & adjusts the calculation of non-cancer acute score
- **AB 2588 and Rule 1402 Supplemental Guidelines** – Provides more clarity for implementation of the AB 2588 Program and Rule 1402, ensures consistency with guidance in other AB 2588 documents
- **Guidelines for Participating in the Rule 1402 Voluntary Risk Reduction Program** – Provides more clarity on requirements for participation

Staff Recommendations

- ◆ Receive and file
 - 2017 Annual Report on the AB 2588 Program
- ◆ Approve updates to the following guidance documents:
 - Facility Prioritization Procedure for the AB 2588 Program
 - AB 2588 and Rule 1401 Supplemental Guidelines
 - Guidelines for Participating in the Rule 1402 Voluntary Risk Reduction Program